

	MEMORIA DE CÁLCULOS: CANTIDADES DE DUCTOS				IA-MC-010	VERSIÓN 0
	PROYECTO	P 19-09 HOSPITAL SAN VICENTE DE PAUL E1	UBICACIÓN	GARZON HUILA	DISEÑADOR	Ing. Diego Castro

ANOTACIONES		
FECHA	5/11/2019	
REVISION	1	D Castro
ANOTACIONES	Version Inicial	16/09/2019
	Entrega final	5/11/2019
	Ajuste	13/03/2021

TABLA DE DATOS																					
																	CALIBRE				
DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	AISLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	7.80				10	4	7.80	24	5.55					26.02				26.02
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	4.63				10	4	4.63	24	3.29					15.44				15.44
A EXTERIOR UFCO-01 al 05	10.00	6.00	1.00	2.84				10	6	2.84	24	2.31					10.83				10.83
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.26				10	4	0.26	24	0.18					0.87				0.87
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.25				10	4	0.25	24	0.18					0.83				0.83
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.22				10	4	0.22	24	0.16					0.73				0.73
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.24				10	4	0.24	24	0.17					0.80				0.80
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.09				10	4	0.09	24	0.06					0.30				0.30
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.13				10	4	0.13	24	0.09					0.43				0.43
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.10				10	4	0.10	24	0.07					0.33				0.33
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.21				10	4	0.21	24	0.15					0.70				0.70
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	1.07				10	4	1.07	24	0.76					3.57				3.57
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.71				10	4	0.71	24	0.50					2.37				2.37
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.34				10	4	0.34	24	0.24					1.13				1.13
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.24				10	4	0.24	24	0.17					0.80				0.80
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.24				10	4	0.24	24	0.17					0.80				0.80
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.21				10	4	0.21	24	0.15					0.70				0.70
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.69				10	4	0.69	24	0.49					2.30				2.30
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.21				10	4	0.21	24	0.15					0.70				0.70
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	1.14				10	4	1.14	24	0.81					3.80				3.80
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.42				10	4	0.42	24	0.30					1.40				1.40
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.16				10	4	0.16	24	0.11					0.53				0.53
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.16				10	4	0.16	24	0.11					0.53				0.53
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	1.17				10	4	1.17	24	0.83					3.90				3.90
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.30				10	4	0.30	24	0.21					1.00				1.00
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.23				10	4	0.23	24	0.16					0.77				0.77
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.16				10	4	0.16	24	0.11					0.53				0.53
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.10				10	4	0.10	24	0.07					0.33				0.33
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.07				10	4	0.07	24	0.05					0.23				0.23
A EXTERIOR UFCO-01 al 05	10.00	6.00	1.00	9.56				10	6	9.56	24	7.77					36.44				36.44
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	1.16				10	4	1.16	24	0.82					3.87				3.87
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.42				10	4	0.42	24	0.30					1.40				1.40
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.16				10	4	0.16	24	0.11					0.53				0.53
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.16				10	4	0.16	24	0.11					0.53				0.53

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.12				10	4	0.12	24	0.09				0.40					0.40
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	1.64				10	4	1.64	24	1.17				5.47					5.47
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.14				10	4	0.14	24	0.10				0.47					0.47
A EXTERIOR UFCO-10 11	10.00	6.00	1.00	3.83				10	6	3.83	24	3.11				14.60					14.60
A EXTERIOR UFCO-10 11	10.00	4.00	1.00	0.07				10	4	0.07	24	0.05				0.23					0.23
A EXTERIOR UFCO-10 11	10.00	4.00	1.00	0.07				10	4	0.07	24	0.05				0.23					0.23
A EXTERIOR UFCO-10 11	10.00	4.00	1.00	0.07				10	4	0.07	24	0.05				0.23					0.23
A EXTERIOR UFCO-10 11	10.00	4.00	1.00	0.07				10	4	0.07	24	0.05				0.23					0.23
A EXTERIOR UFCO-10 11	10.00	6.00	1.00	3.03				10	6	3.03	24	2.46				11.55					11.55
A EXTERIOR UFCO-10 11	10.00	6.00	1.00	1.20				10	6	1.20	24	0.98				4.57					4.57
A EXTERIOR UFCO-10 11	10.00	6.00	1.00	4.21				10	6	4.21	24	3.42				16.05					16.05
A EXTERIOR UFCO-10 11	10.00	6.00	1.00	0.22				10	6	0.22	24	0.18				0.84					0.84
A EXTERIOR URC-01	18.00	8.00	1.00	0.21				18	8	0.21	24	0.28				1.30					1.30
A EXTERIOR URC-01	18.00	8.00	1.00	0.22				18	8	0.22	24	0.29				1.36					1.36
A EXTERIOR URC-01	18.00	8.00	1.00	1.43				18	8	1.43	24	1.89				8.86					8.86
A EXTERIOR URC-01	18.00	8.00	1.00	0.36				18	8	0.36	24	0.48				2.23					2.23
A EXTERIOR URC-01	18.00	8.00	1.00	0.42				18	8	0.42	24	0.55				2.60					2.60
A EXTERIOR URC-01	18.00	8.00	1.00	1.97				18	8	1.97	24	2.60				12.20					12.20
A EXTERIOR URC-01	18.00	8.00	1.00	0.67				18	8	0.67	24	0.88				4.15					4.15
A EXTERIOR URC-01	18.00	8.00	1.00	2.21				18	8	2.21	24	2.92				13.69					13.69
A EXTERIOR URC-01	18.00	8.00	1.00	6.88				18	8	6.88	24	9.09				42.62					42.62
A EXTERIOR URC-01	18.00	8.00	1.00	0.30				18	8	0.30	24	0.40				1.86					1.86
A EXTERIOR URC-01D	18.00	8.00	1.00	0.73				18	8	0.73	24	0.96				4.52					4.52
A EXTERIOR URC-01D	18.00	8.00	1.00	0.97				18	8	0.97	24	1.28				6.01					6.01
A EXTERIOR URC-01D	18.00	8.00	1.00	0.95				18	8	0.95	24	1.25				5.88					5.88
A EXTERIOR URC-01D	18.00	8.00	1.00	1.75				18	8	1.75	24	2.31				10.84					10.84
A EXTERIOR URC-01D	18.00	8.00	1.00	0.29				18	8	0.29	24	0.38				1.80					1.80
A EXTERIOR URC-03	20.00	12.00	1.00	0.60				20	12	0.60	24	0.98				4.57					4.57
A EXTERIOR URC-03	20.00	12.00	1.00	6.19				20	12	6.19	24	10.06				47.19					47.19
A EXTERIOR URC-03	20.00	12.00	1.00	0.33				20	12	0.33	24	0.54				2.52					2.52
A EXTERIOR URC-03	20.00	12.00	1.00	0.50				20	12	0.50	24	0.81				3.81					3.81
A EXTERIOR URC-03	20.00	12.00	1.00	0.33				20	12	0.33	24	0.54				2.52					2.52
A EXTERIOR URC-03	20.00	12.00	1.00	0.30				20	12	0.30	24	0.49				2.29					2.29
A EXTERIOR URC-03	20.00	12.00	1.00	0.34				20	12	0.34	24	0.55				2.59					2.59
A EXTERIOR URC-03	20.00	12.00	1.00	0.34				20	12	0.34	24	0.55				2.59					2.59
A EXTERIOR URC-03	20.00	12.00	1.00	4.99				20	12	4.99	24	8.11				38.04					38.04
A EXTERIOR URC-03	20.00	12.00	1.00	2.58				20	12	2.58	24	4.19				19.67					19.67
A EXTERIOR URC-03	20.00	12.00	1.00	1.05				20	12	1.05	24	1.71				8.01					8.01
A EXTERIOR URC-03	20.00	12.00	1.00	1.60				20	12	1.60	24	2.60				12.20					12.20
A EXTERIOR URC-03	20.00	12.00	1.00	2.24				20	12	2.24	24	3.64				17.08					17.08
A EXTERIOR URC-03	20.00	12.00	1.00	0.34				20	12	0.34	24	0.55				2.59					2.59
A EXTERIOR URC-03D	20.00	12.00	1.00	2.74				20	12	2.74	24	4.45				20.89					20.89
A EXTERIOR URC-03D	20.00	12.00	1.00	0.95				20	12	0.95	24	1.54				7.24					7.24
A EXTERIOR URC-04	18.00	10.00	1.00	0.14				18	10	0.14	24	0.20				0.93					0.93
A EXTERIOR URC-04	18.00	10.00	1.00	10.18				18	10	10.18	24	14.48				67.91					67.91
A EXTERIOR URC-04	18.00	10.00	1.00	33.49				18	10	33.49	24	47.64				223.41					223.41
A EXTERIOR URC-04	18.00	10.00	1.00	12.15				18	10	12.15	24	17.28				81.05					81.05
A EXTERIOR URC-04	18.00	10.00	1.00	3.26				18	10	3.26	24	4.64				21.75					21.75
A EXTERIOR URC-04	18.00	10.00	1.00	5.17				18	10	5.17	24	7.35				34.49					34.49
A EXTERIOR URC-04	18.00	10.00	1.00	0.20				18	10	0.20	24	0.28				1.33					1.33
A EXTERIOR URC-04	18.00	10.00	1.00	3.81				18	10	3.81	24	5.42				25.42					25.42
A EXTERIOR URC-04	18.00	10.00	1.00	2.27				18	10	2.27	24	3.23				15.14					15.14
A EXTERIOR URC-04	18.00	10.00	1.00	2.00				18	10	2.00	24	2.84				13.34					13.34
A EXTERIOR URC-04	18.00	10.00	1.00	2.61				18	10	2.61	24	3.71				17.41					17.41
A EXTERIOR URC-04	18.00	10.00	1.00	0.14				18	10	0.14	24	0.20				0.93					0.93
A EXTERIOR URC-04	18.00	10.00	1.00	0.54				18	10	0.54	24	0.77				3.60					3.60
A EXTERIOR URC-04	18.00	10.00	1.00	3.59				18	10	3.59	24	5.11				23.95					23.95
A EXTERIOR URC-04	18.00	10.00	1.00	1.84				18	10	1.84	24	2.62				12.27					12.27
A EXTERIOR URC-04	18.00	10.00	1.00	1.89				18	10	1.89	24	2.69				12.61					12.61

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
A EXTERIOR URC-04	18.00	10.00	1.00	0.26				18	10	0.26	24	0.37				1.73					1.73
A EXTERIOR URC-04	18.00	10.00	1.00	0.26				18	10	0.26	24	0.37				1.73					1.73
A EXTERIOR URC-04	18.00	10.00	1.00	0.83				18	10	0.83	24	1.18				5.54					5.54
A EXTERIOR URC-04	18.00	10.00	1.00	0.70				18	10	0.70	24	1.00				4.67					4.67
A EXTERIOR URC-04	18.00	10.00	1.00	0.27				18	10	0.27	24	0.38				1.80					1.80
A EXTERIOR URC-04	18.00	10.00	1.00	0.27				18	10	0.27	24	0.38				1.80					1.80
A EXTERIOR URC-04	18.00	10.00	1.00	0.29				18	10	0.29	24	0.41				1.93					1.93
A EXTERIOR URC-04	18.00	10.00	1.00	0.32				18	10	0.32	24	0.46				2.13					2.13
A EXTERIOR URC-04	18.00	10.00	1.00	1.17				18	10	1.17	24	1.66				7.81					7.81
A EXTERIOR URC-04	18.00	10.00	1.00	0.64				18	10	0.64	24	0.91				4.27					4.27
A EXTERIOR URC-04	18.00	10.00	1.00	0.25				18	10	0.25	24	0.36				1.67					1.67
A EXTERIOR URC-04	18.00	10.00	1.00	0.25				18	10	0.25	24	0.36				1.67					1.67
A EXTERIOR URC-04D	18.00	10.00	1.00	0.81				18	10	0.81	24	1.15				5.40					5.40
A EXTERIOR URC-04D	18.00	10.00	1.00	9.70				18	10	9.70	24	13.80				64.71					64.71
A EXTERIOR URC-04D	18.00	10.00	1.00	0.17				18	10	0.17	24	0.24				1.13					1.13
A EXTERIOR URC-06	12.00	12.00	1.00	0.02				12	12	0.02	24	0.02				0.11					0.11
A EXTERIOR URC-06	12.00	12.00	1.00	1.23				12	12	1.23	24	1.50				7.03					7.03
A EXTERIOR URC-06	10.00	10.00	1.00	0.67				10	10	0.67	24	0.68				3.19					3.19
A EXTERIOR URC-06	12.00	12.00	1.00	2.26				12	12	2.26	24	2.76				12.92					12.92
A EXTERIOR URC-06	10.00	10.00	1.00	1.58				10	10	1.58	24	1.61				7.53					7.53
A EXTERIOR URC-06	10.00	10.00	1.00	0.36				10	10	0.36	24	0.37				1.72					1.72
A EXTERIOR URC-06	12.00	12.00	1.00	1.19				12	12	1.19	24	1.45				6.80					6.80
A EXTERIOR URC-06	12.00	12.00	1.00	9.84				12	12	9.84	24	12.00				56.27					56.27
A EXTERIOR URC-06	12.00	12.00	1.00	0.10				12	12	0.10	24	0.12				0.57					0.57
A EXTERIOR URC-06	12.00	12.00	1.00	0.25				12	12	0.25	24	0.30				1.43					1.43
A EXTERIOR URC-06	12.00	12.00	1.00	2.74				12	12	2.74	24	3.34				15.67					15.67
A EXTERIOR URC-06	12.00	12.00	1.00	0.66				12	12	0.66	24	0.80				3.77					3.77
A EXTERIOR URC-07	12.00	12.00	1.00	0.77				12	12	0.77	24	0.94				4.40					4.40
A EXTERIOR URC-07	12.00	12.00	1.00	1.88				12	12	1.88	24	2.29				10.75					10.75
A EXTERIOR URC-07	18.00	12.00	1.00	0.82				18	12	0.82	24	1.25				5.86					5.86
A EXTERIOR URC-07	22.00	14.00	1.00	1.88				22	14	1.88	24	3.44				16.12					16.12
A EXTERIOR URC-07	22.00	14.00	1.00	0.38				22	14	0.38	24	0.69				3.26					3.26
A EXTERIOR URC-07	22.00	14.00	1.00	0.71				22	14	0.71	24	1.30				6.09					6.09
A EXTERIOR URC-07	22.00	14.00	1.00	4.07				22	14	4.07	24	7.44				34.91					34.91
A EXTERIOR URC-07	22.00	14.00	1.00	10.36				22	14	10.36	24	18.95				88.86					88.86
A EXTERIOR URC-07	22.00	14.00	1.00	0.59				22	14	0.59	24	1.08				5.06					5.06
A EXTERIOR URC-08	20.00	14.00	1.00	0.30				20	14	0.30	24	0.52				2.43					2.43
A EXTERIOR URC-08	20.00	14.00	1.00	0.11				20	14	0.11	24	0.19				0.89					0.89
A EXTERIOR URC-08	20.00	14.00	1.00	1.64				20	14	1.64	24	2.83				13.28					13.28
A EXTERIOR URC-08	20.00	14.00	1.00	1.45				20	14	1.45	24	2.50				11.75					11.75
A EXTERIOR URC-08	20.00	14.00	1.00	0.29				20	14	0.29	24	0.50				2.35					2.35
A EXTERIOR URC-09	14.00	14.00	1.00	0.09				14	14	0.09	24	0.13				0.60					0.60
A EXTERIOR URC-09	14.00	14.00	1.00	0.53				14	14	0.53	24	0.75				3.54					3.54
A EXTERIOR URC-09	14.00	14.00	1.00	1.52				14	14	1.52	24	2.16				10.14					10.14
A EXTERIOR URC-09	14.00	14.00	1.00	2.58				14	14	2.58	24	3.67				17.21					17.21
A EXTERIOR URC-09	14.00	14.00	1.00	2.82				14	14	2.82	24	4.01				18.81					18.81
A EXTERIOR URC-09	14.00	14.00	1.00	0.19				14	14	0.19	24	0.27				1.27					1.27
A EXTERIOR URC-09	14.00	14.00	1.00	0.12				14	14	0.12	24	0.17				0.80					0.80
A EXTERIOR URC-11	18.00	14.00	1.00	12.58				18	14	12.58	24	20.45				95.91					95.91
A EXTERIOR URC-11	18.00	14.00	1.00	0.23				18	14	0.23	24	0.37				1.75					1.75
A EXTERIOR URC-11	18.00	14.00	1.00	3.77				18	14	3.77	24	6.13				28.74					28.74
A EXTERIOR URC-11	18.00	14.00	1.00	9.06				18	14	9.06	24	14.73				69.07					69.07
A EXTERIOR URC-11	18.00	14.00	1.00	1.23				18	14	1.23	24	2.00				9.38					9.38
A EXTERIOR URC-11	18.00	14.00	1.00	1.89				18	14	1.89	24	3.07				14.41					14.41
A EXTERIOR URC-11D	18.00	14.00	1.00	1.46				18	14	1.46	24	2.37				11.13					11.13
A EXTERIOR URC-11D	18.00	14.00	1.00	0.36				18	14	0.36	24	0.59				2.74					2.74
A EXTERIOR URC-12	18.00	14.00	1.00	0.29				18	14	0.29	24	0.47				2.21					2.21
A EXTERIOR URC-12	18.00	14.00	1.00	44.91				18	14	44.91	24	73.01				342.40					342.40
A EXTERIOR URC-12	18.00	14.00	1.00	0.11				18	14	0.11	24	0.18				0.84					0.84

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
A EXTERIOR URC-12	18.00	14.00	1.00	4.82				18	14	4.82	24	7.84				36.75					36.75
A EXTERIOR URC-12	18.00	14.00	1.00	0.38				18	14	0.38	24	0.62				2.90					2.90
A EXTERIOR URC-12	18.00	14.00	1.00	0.61				18	14	0.61	24	0.99				4.65					4.65
A EXTERIOR URC-12	18.00	14.00	1.00	0.12				18	14	0.12	24	0.20				0.91					0.91
A EXTERIOR URC-12	18.00	14.00	1.00	1.89				18	14	1.89	24	3.07				14.41					14.41
A EXTERIOR URC-12	18.00	14.00	1.00	4.55				18	14	4.55	24	7.40				34.69					34.69
A EXTERIOR URC-12	18.00	14.00	1.00	0.15				18	14	0.15	24	0.24				1.14					1.14
A EXTERIOR URC-12	18.00	14.00	1.00	0.15				18	14	0.15	24	0.24				1.14					1.14
A EXTERIOR URC-12	18.00	14.00	1.00	0.15				18	14	0.15	24	0.24				1.14					1.14
A EXTERIOR URC-12	18.00	14.00	1.00	0.33				18	14	0.33	24	0.54				2.52					2.52
A EXTERIOR URC-12D	18.00	14.00	1.00	20.65				18	14	20.65	24	33.57				157.44					157.44
A EXTERIOR URC-14	30.00	12.00	1.00	0.43				30	12	0.43	24	0.92				4.30					4.30
A EXTERIOR URC-14	30.00	12.00	1.00	0.14				30	12	0.14	24	0.30				1.40					1.40
A EXTERIOR URC-14	30.00	12.00	1.00	2.75				30	12	2.75	24	5.87				27.52					27.52
A EXTERIOR URC-14	30.00	12.00	1.00	0.41				30	12	0.41	24	0.87				4.10					4.10
A EXTERIOR URC-14	30.00	12.00	1.00	0.61				30	12	0.61	24	1.30				6.10					6.10
EXTRACCION VE-01	6.00	8.00	1.00	6.31				6	8	6.31	24	4.49				21.05					21.05
EXTRACCION VE-01	14.00	10.00	1.00	1.59				14	10	1.59	24	1.94				9.09					9.09
EXTRACCION VE-01	12.00	10.00	1.00	5.84				12	10	5.84	24	6.53				30.61					30.61
EXTRACCION VE-01	8.00	10.00	1.00	6.12				8	10	6.12	24	5.60				26.25					26.25
EXTRACCION VE-01	14.00	6.00	1.00	0.23				14	6	0.23	24	0.23				1.10					1.10
EXTRACCION VE-01	14.00	6.00	1.00	0.36				14	6	0.36	24	0.37				1.72					1.72
EXTRACCION VE-01	14.00	6.00	1.00	0.38				14	6	0.38	24	0.39				1.81					1.81
EXTRACCION VE-01	14.00	6.00	1.00	0.41				14	6	0.41	24	0.42				1.95					1.95
EXTRACCION VE-01D	14.00	10.00	1.00	1.21				14	10	1.21	24	1.48				6.92					6.92
EXTRACCION VE-01D	14.00	10.00	1.00	0.58				14	10	0.58	24	0.71				3.32					3.32
EXTRACCION VE-01D	14.00	10.00	1.00	2.45				14	10	2.45	24	2.99				14.01					14.01
EXTRACCION VE-01D	14.00	10.00	1.00	11.38				14	10	11.38	24	13.87				65.07					65.07
EXTRACCION VE-01D	14.00	10.00	1.00	5.08				14	10	5.08	24	6.19				29.05					29.05
EXTRACCION VE-01D	14.00	10.00	1.00	0.13				14	10	0.13	24	0.16				0.74					0.74
EXTRACCION VE-01D	14.00	10.00	1.00	2.25				14	10	2.25	24	2.74				12.87					12.87
EXTRACCION VE-01D	14.00	10.00	1.00	0.06				14	10	0.06	24	0.07				0.34					0.34
EXTRACCION VE-01D	14.00	10.00	1.00	0.28				14	10	0.28	24	0.34				1.60					1.60
EXTRACCION VE-01D	14.00	10.00	1.00	2.26				14	10	2.26	24	2.76				12.92					12.92
EXTRACCION VE-02	10.00	4.00	1.00	1.50				10	4	1.50	24	1.07				5.00					5.00
EXTRACCION VE-02	10.00	6.00	1.00	1.36				10	6	1.36	24	1.11				5.18					5.18
EXTRACCION VE-02	8.00	8.00	1.00	0.19				8	8	0.19	24	0.15				0.72					0.72
EXTRACCION VE-02	10.00	4.00	1.00	1.52				10	4	1.52	24	1.08				5.07					5.07
EXTRACCION VE-02	8.00	8.00	1.00	0.22				8	8	0.22	24	0.18				0.84					0.84
EXTRACCION VE-02	12.00	8.00	1.00	0.70				12	8	0.70	24	0.71				3.34					3.34
EXTRACCION VE-02	10.00	4.00	1.00	4.08				10	4	4.08	24	2.90				13.61					13.61
EXTRACCION VE-02	8.00	8.00	1.00	0.19				8	8	0.19	24	0.15				0.72					0.72
EXTRACCION VE-02	8.00	8.00	1.00	0.19				8	8	0.19	24	0.15				0.72					0.72
EXTRACCION VE-02	10.00	6.00	1.00	3.05				10	6	3.05	24	2.48				11.63					11.63
EXTRACCION VE-02	10.00	4.00	1.00	3.65				10	4	3.65	24	2.60				12.17					12.17
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	10.00	4.00	1.00	4.81				10	4	4.81	24	3.42				16.04					16.04
EXTRACCION VE-02	10.00	4.00	1.00	0.51				10	4	0.51	24	0.36				1.70					1.70
EXTRACCION VE-02	10.00	4.00	1.00	1.27				10	4	1.27	24	0.90				4.24					4.24
EXTRACCION VE-02	10.00	4.00	1.00	1.82				10	4	1.82	24	1.29				6.07					6.07
EXTRACCION VE-02	10.00	6.00	1.00	1.09				10	6	1.09	24	0.89				4.16					4.16
EXTRACCION VE-02	10.00	4.00	1.00	1.16				10	4	1.16	24	0.82				3.87					3.87
EXTRACCION VE-02	10.00	4.00	1.00	1.12				10	4	1.12	24	0.80				3.74					3.74
EXTRACCION VE-02	10.00	4.00	1.00	1.06				10	4	1.06	24	0.75				3.54					3.54
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	10.00	4.00	1.00	1.19				10	4	1.19	24	0.85				3.97					3.97
EXTRACCION VE-02	10.00	4.00	1.00	1.25				10	4	1.25	24	0.89				4.17					4.17
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-02	16.00	6.00	1.00	1.48				16	6	1.48	24	1.65				7.76					7.76
EXTRACCION VE-02	10.00	4.00	1.00	1.14				10	4	1.14	24	0.81				3.80					3.80
EXTRACCION VE-02	10.00	4.00	1.00	1.34				10	4	1.34	24	0.95				4.47					4.47
EXTRACCION VE-02	10.00	4.00	1.00	1.51				10	4	1.51	24	1.07				5.04					5.04
EXTRACCION VE-02	10.00	4.00	1.00	1.27				10	4	1.27	24	0.90				4.24					4.24
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-02	10.00	4.00	1.00	0.71				10	4	0.71	24	0.50				2.37					2.37
EXTRACCION VE-02	26.00	14.00	1.00	9.44				26	14	9.44	24	19.18				89.96					89.96
EXTRACCION VE-02	10.00	4.00	1.00	4.24				10	4	4.24	24	3.02				14.14					14.14
EXTRACCION VE-02	8.00	8.00	1.00	0.09				8	8	0.09	24	0.07				0.34					0.34
EXTRACCION VE-02	10.00	4.00	1.00	2.40				10	4	2.40	24	1.71				8.01					8.01
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-02	10.00	4.00	1.00	1.45				10	4	1.45	24	1.03				4.84					4.84
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	10.00	4.00	1.00	7.51				10	4	7.51	24	5.34				25.05					25.05
EXTRACCION VE-02	30.00	16.00	1.00	4.36				30	16	4.36	24	10.19				47.78					47.78
EXTRACCION VE-02	26.00	14.00	1.00	5.14				26	14	5.14	24	10.44				48.98					48.98
EXTRACCION VE-02	16.00	8.00	1.00	3.35				16	8	3.35	24	4.08				19.16					19.16
EXTRACCION VE-02	18.00	10.00	1.00	13.38				18	10	13.38	24	19.03				89.26					89.26
EXTRACCION VE-02	10.00	4.00	1.00	1.42				10	4	1.42	24	1.01				4.74					4.74
EXTRACCION VE-02	30.00	16.00	1.00	30.93				30	16	30.93	24	72.28				338.98					338.98
EXTRACCION VE-02	10.00	4.00	1.00	1.27				10	4	1.27	24	0.90				4.24					4.24
EXTRACCION VE-02	14.00	8.00	1.00	4.08				14	8	4.08	24	4.56				21.39					21.39
EXTRACCION VE-02	18.00	10.00	1.00	2.68				18	10	2.68	24	3.81				17.88					17.88
EXTRACCION VE-02	18.00	12.00	1.00	3.40				18	12	3.40	24	5.18				24.30					24.30
EXTRACCION VE-02	24.00	12.00	1.00	1.49				24	12	1.49	24	2.72				12.78					12.78
EXTRACCION VE-02	10.00	6.00	1.00	3.51				10	6	3.51	24	2.85				13.38					13.38
EXTRACCION VE-02	10.00	4.00	1.00	1.16				10	4	1.16	24	0.82				3.87					3.87
EXTRACCION VE-02	12.00	6.00	1.00	2.44				12	6	2.44	24	2.23				10.46					10.46
EXTRACCION VE-02	12.00	6.00	1.00	2.44				12	6	2.44	24	2.23				10.46					10.46
EXTRACCION VE-02	16.00	6.00	1.00	1.41				16	6	1.41	24	1.58				7.39					7.39
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	10.00	4.00	1.00	1.60				10	4	1.60	24	1.14				5.34					5.34
EXTRACCION VE-02	10.00	4.00	1.00	1.02				10	4	1.02	24	0.73				3.40					3.40
EXTRACCION VE-02	10.00	6.00	1.00	3.12				10	6	3.12	24	2.54				11.89					11.89
EXTRACCION VE-02	14.00	8.00	1.00	3.96				14	8	3.96	24	4.43				20.76					20.76
EXTRACCION VE-02	10.00	4.00	1.00	0.59				10	4	0.59	24	0.42				1.97					1.97
EXTRACCION VE-02	12.00	4.00	1.00	1.05				12	4	1.05	24	0.85				4.00					4.00
EXTRACCION VE-02	12.00	4.00	1.00	0.27				12	4	0.27	24	0.22				1.03					1.03
EXTRACCION VE-02	12.00	4.00	1.00	0.86				12	4	0.86	24	0.70				3.28					3.28
EXTRACCION VE-02	12.00	8.00	1.00	1.07				12	8	1.07	24	1.09				5.10					5.10
EXTRACCION VE-02	10.00	4.00	1.00	0.72				10	4	0.72	24	0.51				2.40					2.40
EXTRACCION VE-02	8.00	8.00	1.00	0.09				8	8	0.09	24	0.07				0.34					0.34
EXTRACCION VE-02	10.00	10.00	1.00	0.10				10	10	0.10	24	0.10				0.48					0.48
EXTRACCION VE-02	8.00	8.00	1.00	0.09				8	8	0.09	24	0.07				0.34					0.34
EXTRACCION VE-02	10.00	4.00	1.00	1.97				10	4	1.97	24	1.40				6.57					6.57
EXTRACCION VE-02	8.00	8.00	1.00	0.19				8	8	0.19	24	0.15				0.72					0.72
EXTRACCION VE-02	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-02	10.00	4.00	1.00	1.01				10	4	1.01	24	0.72				3.37					3.37
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	10.00	4.00	1.00	4.48				10	4	4.48	24	3.19				14.94					14.94
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	10.00	4.00	1.00	0.86				10	4	0.86	24	0.61				2.87					2.87
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	10.00	4.00	1.00	0.53				10	4	0.53	24	0.38				1.77					1.77
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	10.00	4.00	1.00	6.09				10	4	6.09	24	4.33				20.31					20.31
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	10.00	4.00	1.00	0.50				10	4	0.50	24	0.36				1.67					1.67
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	10.00	4.00	1.00	6.62				10	4	6.62	24	4.71				22.08					22.08
EXTRACCION VE-02	10.00	4.00	1.00	0.61				10	4	0.61	24	0.43				2.03					2.03
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-02	10.00	6.00	1.00	1.96				10	6	1.96	24	1.59				7.47					7.47
EXTRACCION VE-02	10.00	6.00	1.00	1.00				10	6	1.00	24	0.81				3.81					3.81
EXTRACCION VE-02	10.00	6.00	1.00	1.12				10	6	1.12	24	0.91				4.27					4.27
EXTRACCION VE-02	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-02	16.00	6.00	1.00	0.68				16	6	0.68	24	0.76				3.56					3.56
EXTRACCION VE-02	10.00	4.00	1.00	0.64				10	4	0.64	24	0.46				2.13					2.13
EXTRACCION VE-02	10.00	4.00	1.00	0.51				10	4	0.51	24	0.36				1.70					1.70
EXTRACCION VE-02	16.00	30.00	1.00	1.78				16	30	1.78	24	4.16				19.51					19.51
EXTRACCION VE-02	16.00	30.00	1.00	0.24				16	30	0.24	24	0.56				2.63					2.63
EXTRACCION VE-02	10.00	4.00	1.00	0.50				10	4	0.50	24	0.36				1.67					1.67
EXTRACCION VE-02	10.00	4.00	1.00	0.15				10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-02	10.00	6.00	1.00	4.92				10	6	4.92	24	4.00				18.76					18.76
EXTRACCION VE-02	10.00	6.00	1.00	0.56				10	6	0.56	24	0.46				2.13					2.13
EXTRACCION VE-02	10.00	6.00	1.00	0.11				10	6	0.11	24	0.09				0.42					0.42
EXTRACCION VE-02	10.00	6.00	1.00	0.11				10	6	0.11	24	0.09				0.42					0.42
EXTRACCION VE-02	18.00	10.00	1.00	6.48				18	10	6.48	24	9.22				43.23					43.23
EXTRACCION VE-02	18.00	10.00	1.00	0.81				18	10	0.81	24	1.15				5.40					5.40
EXTRACCION VE-02	18.00	10.00	1.00	0.95				18	10	0.95	24	1.35				6.34					6.34
EXTRACCION VE-02	14.00	8.00	1.00	0.24				14	8	0.24	24	0.27				1.26					1.26
EXTRACCION VE-02	14.00	8.00	1.00	1.13				14	8	1.13	24	1.26				5.92					5.92
EXTRACCION VE-02	8.00	8.00	1.00	0.14				8	8	0.14	24	0.11				0.53					0.53
EXTRACCION VE-02	10.00	6.00	1.00	0.11				10	6	0.11	24	0.09				0.42					0.42
EXTRACCION VE-02	10.00	6.00	1.00	0.23				10	6	0.23	24	0.19				0.88					0.88
EXTRACCION VE-02	24.00	12.00	1.00	0.19				24	12	0.19	24	0.35				1.63					1.63
EXTRACCION VE-02	24.00	12.00	1.00	0.68				24	12	0.68	24	1.24				5.83					5.83
EXTRACCION VE-02	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-02	10.00	6.00	1.00	2.72				10	6	2.72	24	2.21				10.37					10.37
EXTRACCION VE-02	10.00	4.00	1.00	4.80				10	4	4.80	24	3.41				16.01					16.01
EXTRACCION VE-02	10.00	4.00	1.00	4.29				10	4	4.29	24	3.05				14.31					14.31
EXTRACCION VE-02	10.00	4.00	1.00	3.20				10	4	3.20	24	2.28				10.67					10.67
EXTRACCION VE-02	10.00	4.00	1.00	1.22				10	4	1.22	24	0.87				4.07					4.07
EXTRACCION VE-02	10.00	4.00	1.00	0.20				10	4	0.20	24	0.14				0.67					0.67
EXTRACCION VE-02	10.00	4.00	1.00	0.12				10	4	0.12	24	0.09				0.40					0.40
EXTRACCION VE-02	10.00	4.00	1.00	0.20				10	4	0.20	24	0.14				0.67					0.67
EXTRACCION VE-03	8.00	8.00	1.00	2.12				8	8	2.12	24	1.72				8.08					8.08
EXTRACCION VE-03	14.00	6.00	1.00	3.10				14	6	3.10	24	3.15				14.77					14.77
EXTRACCION VE-03	12.00	12.00	1.00	0.07				12	12	0.07	24	0.09				0.40					0.40
EXTRACCION VE-03	14.00	8.00	1.00	4.45				14	8	4.45	24	4.97				23.32					23.32
EXTRACCION VE-03	14.00	8.00	1.00	0.69				14	8	0.69	24	0.77				3.62					3.62
EXTRACCION VE-03	14.00	8.00	1.00	2.66				14	8	2.66	24	2.97				13.94					13.94
EXTRACCION VE-03	14.00	8.00	1.00	32.09				14	8	32.09	24	35.86				168.20					168.20

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-03	10.00	4.00	1.00	1.96				10	4	1.96	24	1.39				6.54					6.54
EXTRACCION VE-03	10.00	4.00	1.00	4.53				10	4	4.53	24	3.22				15.11					15.11
EXTRACCION VE-03	14.00	8.00	1.00	11.35				14	8	11.35	24	12.68				59.49					59.49
EXTRACCION VE-03	14.00	8.00	1.00	0.74				14	8	0.74	24	0.83				3.88					3.88
EXTRACCION VE-03	14.00	8.00	1.00	0.03				14	8	0.03	24	0.03				0.16					0.16
EXTRACCION VE-03	14.00	8.00	1.00	0.03				14	8	0.03	24	0.03				0.16					0.16
EXTRACCION VE-03	8.00	14.00	1.00	1.72				8	14	1.72	24	1.92				9.02					9.02
EXTRACCION VE-03	8.00	14.00	1.00	0.09				8	14	0.09	24	0.10				0.47					0.47
EXTRACCION VE-08	10.00	4.00	1.00	0.98				10	4	0.98	24	0.70				3.27					3.27
EXTRACCION VE-08	10.00	4.00	1.00	0.86				10	4	0.86	24	0.61				2.87					2.87
EXTRACCION VE-08	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-08	8.00	8.00	1.00	0.62				8	8	0.62	24	0.50				2.36					2.36
EXTRACCION VE-08	10.00	4.00	1.00	1.12				10	4	1.12	24	0.80				3.74					3.74
EXTRACCION VE-08	8.00	8.00	1.00	0.62				8	8	0.62	24	0.50				2.36					2.36
EXTRACCION VE-08	10.00	4.00	1.00	3.06				10	4	3.06	24	2.18				10.21					10.21
EXTRACCION VE-08	12.00	6.00	1.00	15.10				12	6	15.10	24	13.81				64.76					64.76
EXTRACCION VE-08	12.00	6.00	1.00	8.23				12	6	8.23	24	7.53				35.29					35.29
EXTRACCION VE-08	12.00	6.00	1.00	7.56				12	6	7.56	24	6.91				32.42					32.42
EXTRACCION VE-08	12.00	6.00	1.00	27.97				12	6	27.97	24	25.58				119.95					119.95
EXTRACCION VE-08	12.00	6.00	1.00	1.93				12	6	1.93	24	1.76				8.28					8.28
EXTRACCION VE-08	12.00	6.00	1.00	1.95				12	6	1.95	24	1.78				8.36					8.36
EXTRACCION VE-08	12.00	6.00	1.00	0.60				12	6	0.60	24	0.55				2.57					2.57
EXTRACCION VE-08	12.00	6.00	1.00	5.13				12	6	5.13	24	4.69				22.00					22.00
EXTRACCION VE-08	12.00	6.00	1.00	0.38				12	6	0.38	24	0.35				1.63					1.63
EXTRACCION VE-09	14.00	8.00	1.00	27.74				14	8	27.74	24	31.00				145.40					145.40
EXTRACCION VE-09	10.00	10.00	1.00	0.39				10	10	0.39	24	0.40				1.86					1.86
EXTRACCION VE-09	12.00	4.00	1.00	5.16				12	4	5.16	24	4.19				19.67					19.67
EXTRACCION VE-09	10.00	10.00	1.00	0.29				10	10	0.29	24	0.29				1.38					1.38
EXTRACCION VE-09	14.00	8.00	1.00	0.95				14	8	0.95	24	1.06				4.98					4.98
EXTRACCION VE-09	14.00	8.00	1.00	2.56				14	8	2.56	24	2.86				13.42					13.42
EXTRACCION VE-09	14.00	8.00	1.00	2.88				14	8	2.88	24	3.22				15.10					15.10
EXTRACCION VE-09	14.00	8.00	1.00	8.92				14	8	8.92	24	9.97				46.75					46.75
EXTRACCION VE-09	14.00	8.00	1.00	1.89				14	8	1.89	24	2.11				9.91					9.91
EXTRACCION VE-09	14.00	8.00	1.00	8.74				14	8	8.74	24	9.77				45.81					45.81
EXTRACCION VE-09	14.00	8.00	1.00	7.98				14	8	7.98	24	8.92				41.83					41.83
EXTRACCION VE-09	8.00	14.00	1.00	0.72				8	14	0.72	24	0.80				3.77					3.77
EXTRACCION VE-09	8.00	14.00	1.00	0.83				8	14	0.83	24	0.93				4.35					4.35
EXTRACCION VE-09	8.00	14.00	1.00	0.13				8	14	0.13	24	0.15				0.68					0.68
EXTRACCION VE-09	8.00	14.00	1.00	0.14				8	14	0.14	24	0.16				0.73					0.73
EXTRACCION VE-09	14.00	8.00	1.00	0.95				14	8	0.95	24	1.06				4.98					4.98
EXTRACCION VE-09	14.00	8.00	1.00	0.68				14	8	0.68	24	0.76				3.56					3.56
EXTRACCION VE-09	14.00	8.00	1.00	5.07				14	8	5.07	24	5.67				26.57					26.57
EXTRACCION VE-09	14.00	8.00	1.00	0.25				14	8	0.25	24	0.28				1.31					1.31
EXTRACCION VE-10	10.00	4.00	1.00	2.52				10	4	2.52	24	1.79				8.41					8.41
EXTRACCION VE-10	14.00	6.00	1.00	5.43				14	6	5.43	24	5.52				25.87					25.87
EXTRACCION VE-10	16.00	8.00	1.00	4.87				16	8	4.87	24	5.94				27.85					27.85
EXTRACCION VE-10	10.00	4.00	1.00	1.45				10	4	1.45	24	1.03				4.84					4.84
EXTRACCION VE-10	8.00	8.00	1.00	0.08				8	8	0.08	24	0.07				0.30					0.30
EXTRACCION VE-10	10.00	4.00	1.00	0.95				10	4	0.95	24	0.68				3.17					3.17
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	10.00	4.00	1.00	1.46				10	4	1.46	24	1.04				4.87					4.87
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	8.00	8.00	1.00	0.13				8	8	0.13	24	0.11				0.50					0.50
EXTRACCION VE-10	8.00	8.00	1.00	0.13				8	8	0.13	24	0.11				0.50					0.50
EXTRACCION VE-10	8.00	8.00	1.00	0.13				8	8	0.13	24	0.11				0.50					0.50
EXTRACCION VE-10	10.00	4.00	1.00	7.16				10	4	7.16	24	5.09				23.88					23.88
EXTRACCION VE-10	10.00	4.00	1.00	2.65				10	4	2.65	24	1.88				8.84					8.84
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	10.00	4.00	1.00	8.38				10	4	8.38	24	5.96				27.95					27.95

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-10	8.00	8.00	1.00	0.63				8	8	0.63	24	0.51				2.40					2.40
EXTRACCION VE-10	8.00	8.00	1.00	0.13				8	8	0.13	24	0.11				0.50					0.50
EXTRACCION VE-10	14.00	6.00	1.00	5.05				14	6	5.05	24	5.13				24.06					24.06
EXTRACCION VE-10	10.00	4.00	1.00	4.47				10	4	4.47	24	3.18				14.91					14.91
EXTRACCION VE-10	8.00	8.00	1.00	0.07				8	8	0.07	24	0.06				0.27					0.27
EXTRACCION VE-10	10.00	4.00	1.00	1.05				10	4	1.05	24	0.75				3.50					3.50
EXTRACCION VE-10	8.00	8.00	1.00	0.13				8	8	0.13	24	0.11				0.50					0.50
EXTRACCION VE-10	10.00	4.00	1.00	2.08				10	4	2.08	24	1.48				6.94					6.94
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	10.00	4.00	1.00	0.67				10	4	0.67	24	0.48				2.23					2.23
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	10.00	4.00	1.00	1.25				10	4	1.25	24	0.89				4.17					4.17
EXTRACCION VE-10	10.00	4.00	1.00	0.95				10	4	0.95	24	0.68				3.17					3.17
EXTRACCION VE-10	8.00	8.00	1.00	0.07				8	8	0.07	24	0.06				0.27					0.27
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	10.00	4.00	1.00	1.89				10	4	1.89	24	1.34				6.30					6.30
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	10.00	4.00	1.00	1.29				10	4	1.29	24	0.92				4.30					4.30
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	28.00	14.00	1.00	5.88				28	14	5.88	24	12.55				58.84					58.84
EXTRACCION VE-10	10.00	4.00	1.00	2.19				10	4	2.19	24	1.56				7.30					7.30
EXTRACCION VE-10	10.00	4.00	1.00	4.37				10	4	4.37	24	3.11				14.58					14.58
EXTRACCION VE-10	10.00	4.00	1.00	1.35				10	4	1.35	24	0.96				4.50					4.50
EXTRACCION VE-10	8.00	8.00	1.00	0.26				8	8	0.26	24	0.21				0.99					0.99
EXTRACCION VE-10	10.00	4.00	1.00	1.37				10	4	1.37	24	0.97				4.57					4.57
EXTRACCION VE-10	8.00	8.00	1.00	0.26				8	8	0.26	24	0.21				0.99					0.99
EXTRACCION VE-10	10.00	4.00	1.00	1.05				10	4	1.05	24	0.75				3.50					3.50
EXTRACCION VE-10	8.00	8.00	1.00	0.26				8	8	0.26	24	0.21				0.99					0.99
EXTRACCION VE-10	10.00	4.00	1.00	1.05				10	4	1.05	24	0.75				3.50					3.50
EXTRACCION VE-10	8.00	8.00	1.00	0.26				8	8	0.26	24	0.21				0.99					0.99
EXTRACCION VE-10	10.00	4.00	1.00	0.26				8	8	0.26	24	0.21				0.99					0.99
EXTRACCION VE-10	10.00	4.00	1.00	3.19				10	4	3.19	24	2.27				10.64					10.64
EXTRACCION VE-10	10.00	4.00	1.00	2.92				10	4	2.92	24	2.08				9.74					9.74
EXTRACCION VE-10	8.00	8.00	1.00	0.26				8	8	0.26	24	0.21				0.99					0.99
EXTRACCION VE-10	8.00	8.00	1.00	0.26				8	8	0.26	24	0.21				0.99					0.99
EXTRACCION VE-10	8.00	8.00	1.00	0.26				8	8	0.26	24	0.21				0.99					0.99
EXTRACCION VE-10	10.00	4.00	1.00	6.61				10	4	6.61	24	4.70				22.05					22.05
EXTRACCION VE-10	10.00	4.00	1.00	9.66				10	4	9.66	24	6.87				32.22					32.22
EXTRACCION VE-10	12.00	6.00	1.00	7.67				12	6	7.67	24	7.01				32.89					32.89
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	10.00	6.00	1.00	6.15				10	6	6.15	24	5.00				23.44					23.44
EXTRACCION VE-10	8.00	8.00	1.00	0.27				8	8	0.27	24	0.22				1.03					1.03
EXTRACCION VE-10	10.00	4.00	1.00	0.65				10	4	0.65	24	0.46				2.17					2.17
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	10.00	4.00	1.00	0.65				10	4	0.65	24	0.46				2.17					2.17
EXTRACCION VE-10	10.00	4.00	1.00	1.96				10	4	1.96	24	1.39				6.54					6.54
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	10.00	4.00	1.00	0.65				10	4	0.65	24	0.46				2.17					2.17
EXTRACCION VE-10	10.00	4.00	1.00	2.75				10	4	2.75	24	1.96				9.17					9.17
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	28.00	14.00	1.00	2.08				28	14	2.08	24	4.44				20.81					20.81
EXTRACCION VE-10	10.00	4.00	1.00	4.35				10	4	4.35	24	3.09				14.51					14.51
EXTRACCION VE-10	10.00	4.00	1.00	0.49				10	4	0.49	24	0.35				1.63					1.63
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	10.00	4.00	1.00	1.28				10	4	1.28	24	0.91				4.27					4.27
EXTRACCION VE-10	10.00	6.00	1.00	4.59				10	6	4.59	24	3.73				17.50					17.50
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	10.00	4.00	1.00	2.31				10	4	2.31	24	1.64				7.71					7.71
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	10.00	4.00	1.00	5.63				10	4	5.63	24	4.00				18.78					18.78
EXTRACCION VE-10	10.00	4.00	1.00	1.56				10	4	1.56	24	1.11				5.20					5.20
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-10	10.00	4.00	1.00	1.44				10	4	1.44	24	1.02				4.80					4.80
EXTRACCION VE-10	8.00	8.00	1.00	0.26				8	8	0.26	24	0.21				0.99					0.99
EXTRACCION VE-10	28.00	14.00	1.00	26.70				28	14	26.70	24	56.97				267.18					267.18
EXTRACCION VE-10	12.00	6.00	1.00	3.70				12	6	3.70	24	3.38				15.87					15.87
EXTRACCION VE-10	14.00	6.00	1.00	3.28				14	6	3.28	24	3.33				15.63					15.63
EXTRACCION VE-10	14.00	6.00	1.00	9.44				14	6	9.44	24	9.59				44.98					44.98
EXTRACCION VE-10	16.00	10.00	1.00	3.94				16	10	3.94	24	5.20				24.41					24.41
EXTRACCION VE-10	12.00	8.00	1.00	5.40				12	8	5.40	24	5.49				25.73					25.73
EXTRACCION VE-10	14.00	8.00	1.00	3.37				14	8	3.37	24	3.77				17.66					17.66
EXTRACCION VE-10	10.00	4.00	1.00	3.30				10	4	3.30	24	2.35				11.01					11.01
EXTRACCION VE-10	10.00	4.00	1.00	4.12				10	4	4.12	24	2.93				13.74					13.74
EXTRACCION VE-10	10.00	4.00	1.00	1.21				10	4	1.21	24	0.86				4.04					4.04
EXTRACCION VE-10	8.00	8.00	1.00	0.27				8	8	0.27	24	0.22				1.03					1.03
EXTRACCION VE-10	14.00	8.00	1.00	6.12				14	8	6.12	24	6.84				32.08					32.08
EXTRACCION VE-10	10.00	4.00	1.00	5.38				10	4	5.38	24	3.83				17.95					17.95
EXTRACCION VE-10	10.00	6.00	1.00	3.12				10	6	3.12	24	2.54				11.89					11.89
EXTRACCION VE-10	10.00	4.00	1.00	2.52				10	4	2.52	24	1.79				8.41					8.41
EXTRACCION VE-10	18.00	6.00	1.00	1.53				18	6	1.53	24	1.87				8.75					8.75
EXTRACCION VE-10	14.00	28.00	1.00	0.08				14	28	0.08	24	0.17				0.80					0.80
EXTRACCION VE-10	14.00	28.00	1.00	0.58				14	28	0.58	24	1.24				5.80					5.80
EXTRACCION VE-10	14.00	28.00	1.00	0.86				14	28	0.86	24	1.83				8.61					8.61
EXTRACCION VE-10	14.00	28.00	1.00	0.32				14	28	0.32	24	0.68				3.20					3.20
EXTRACCION VE-10	10.00	4.00	1.00	2.22				10	4	2.22	24	1.58				7.40					7.40
EXTRACCION VE-10	10.00	4.00	1.00	0.34				10	4	0.34	24	0.24				1.13					1.13
EXTRACCION VE-10	10.00	4.00	1.00	0.10				10	4	0.10	24	0.07				0.33					0.33
EXTRACCION VE-10	10.00	4.00	1.00	0.34				10	4	0.34	24	0.24				1.13					1.13
EXTRACCION VE-10	10.00	4.00	1.00	0.10				10	4	0.10	24	0.07				0.33					0.33
EXTRACCION VE-10	10.00	4.00	1.00	1.52				10	4	1.52	24	1.08				5.07					5.07
EXTRACCION VE-10	10.00	4.00	1.00	2.67				10	4	2.67	24	1.90				8.91					8.91
EXTRACCION VE-10	10.00	4.00	1.00	1.61				10	4	1.61	24	1.15				5.37					5.37
EXTRACCION VE-10	10.00	4.00	1.00	0.13				10	4	0.13	24	0.09				0.43					0.43
EXTRACCION VE-10	16.00	10.00	1.00	0.15				16	10	0.15	24	0.20				0.93					0.93
EXTRACCION VE-10	16.00	10.00	1.00	0.39				16	10	0.39	24	0.52				2.42					2.42
EXTRACCION VE-10	24.00	10.00	1.00	3.21				24	10	3.21	24	5.54				26.00					26.00
EXTRACCION VE-10	24.00	10.00	1.00	0.38				24	10	0.38	24	0.66				3.08					3.08
EXTRACCION VE-10	14.00	8.00	1.00	1.30				14	8	1.30	24	1.45				6.81					6.81
EXTRACCION VE-10	14.00	8.00	1.00	0.20				14	8	0.20	24	0.22				1.05					1.05
EXTRACCION VE-10	24.00	10.00	1.00	1.64				24	10	1.64	24	2.83				13.28					13.28
EXTRACCION VE-10	26.00	12.00	1.00	4.33				26	12	4.33	24	8.36				39.20					39.20
EXTRACCION VE-10	24.00	10.00	1.00	0.23				24	10	0.23	24	0.40				1.86					1.86
EXTRACCION VE-10	26.00	12.00	1.00	4.38				26	12	4.38	24	8.46				39.65					39.65
EXTRACCION VE-10	26.00	12.00	1.00	0.36				26	12	0.36	24	0.69				3.26					3.26
EXTRACCION VE-10	24.00	14.00	1.00	4.16				24	14	4.16	24	8.03				37.66					37.66
EXTRACCION VE-10	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-10	24.00	10.00	1.00	12.87				24	10	12.87	24	22.23				104.25					104.25
EXTRACCION VE-10	16.00	10.00	1.00	0.51				16	10	0.51	24	0.67				3.16					3.16
EXTRACCION VE-10	16.00	10.00	1.00	1.05				16	10	1.05	24	1.39				6.50					6.50
EXTRACCION VE-10	16.00	10.00	1.00	0.07				16	10	0.07	24	0.09				0.43					0.43
EXTRACCION VE-10	16.00	10.00	1.00	0.21				16	10	0.21	24	0.28				1.30					1.30
EXTRACCION VE-10	16.00	10.00	1.00	0.76				16	10	0.76	24	1.00				4.71					4.71
EXTRACCION VE-18	16.00	6.00	1.00	1.15				16	6	1.15	24	1.29				6.03					6.03
EXTRACCION VE-18	10.00	4.00	1.00	0.68				10	4	0.68	24	0.48				2.27					2.27

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-18	8.00	8.00	1.00	0.17				8	8	0.17	24	0.14				0.65					0.65
EXTRACCION VE-18	8.00	8.00	1.00	0.17				8	8	0.17	24	0.14				0.65					0.65
EXTRACCION VE-18	10.00	4.00	1.00	4.58				10	4	4.58	24	3.26				15.28					15.28
EXTRACCION VE-18	10.00	4.00	1.00	1.39				10	4	1.39	24	0.99				4.64					4.64
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	10.00	4.00	1.00	4.14				10	4	4.14	24	2.94				13.81					13.81
EXTRACCION VE-18	8.00	8.00	1.00	0.15				8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	10.00	4.00	1.00	2.18				10	4	2.18	24	1.55				7.27					7.27
EXTRACCION VE-18	16.00	10.00	1.00	2.89				16	10	2.89	24	3.82				17.90					17.90
EXTRACCION VE-18	8.00	8.00	1.00	0.33				8	8	0.33	24	0.27				1.26					1.26
EXTRACCION VE-18	8.00	8.00	1.00	0.33				8	8	0.33	24	0.27				1.26					1.26
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	8.00	8.00	1.00	0.15				8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	10.00	8.00	1.00	2.43				10	8	2.43	24	2.22				10.42					10.42
EXTRACCION VE-18	10.00	4.00	1.00	2.26				10	4	2.26	24	1.61				7.54					7.54
EXTRACCION VE-18	10.00	4.00	1.00	0.38				10	4	0.38	24	0.27				1.27					1.27
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-18	10.00	6.00	1.00	3.66				10	6	3.66	24	2.97				13.95					13.95
EXTRACCION VE-18	10.00	8.00	1.00	16.82				10	8	16.82	24	15.38				72.13					72.13
EXTRACCION VE-18	14.00	8.00	1.00	1.55				14	8	1.55	24	1.73				8.12					8.12
EXTRACCION VE-18	18.00	10.00	1.00	11.39				18	10	11.39	24	16.20				75.98					75.98
EXTRACCION VE-18	10.00	6.00	1.00	0.80				10	6	0.80	24	0.65				3.05					3.05
EXTRACCION VE-18	10.00	6.00	1.00	0.22				10	6	0.22	24	0.18				0.84					0.84
EXTRACCION VE-18	10.00	6.00	1.00	4.17				10	6	4.17	24	3.39				15.90					15.90
EXTRACCION VE-18	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-18	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-18	12.00	6.00	1.00	1.40				12	6	1.40	24	1.28				6.00					6.00
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-18	10.00	4.00	1.00	1.74				10	4	1.74	24	1.24				5.80					5.80
EXTRACCION VE-18	16.00	10.00	1.00	23.55				16	10	23.55	24	31.10				145.88					145.88
EXTRACCION VE-18	10.00	4.00	1.00	0.54				10	4	0.54	24	0.38				1.80					1.80
EXTRACCION VE-18	10.00	4.00	1.00	3.83				10	4	3.83	24	2.72				12.78					12.78
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	12.00	6.00	1.00	8.48				12	6	8.48	24	7.75				36.37					36.37
EXTRACCION VE-18	10.00	4.00	1.00	3.28				10	4	3.28	24	2.33				10.94					10.94
EXTRACCION VE-18	10.00	4.00	1.00	3.94				10	4	3.94	24	2.80				13.14					13.14
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	10.00	4.00	1.00	1.11				10	4	1.11	24	0.79				3.70					3.70
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	10.00	6.00	1.00	7.17				10	6	7.17	24	5.83				27.33					27.33
EXTRACCION VE-18	10.00	4.00	1.00	1.29				10	4	1.29	24	0.92				4.30					4.30
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	10.00	4.00	1.00	2.26				10	4	2.26	24	1.61				7.54					7.54
EXTRACCION VE-18	10.00	4.00	1.00	1.42				10	4	1.42	24	1.01				4.74					4.74
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-18	10.00	4.00	1.00	1.74				10	4	1.74	24	1.24				5.80					5.80
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	10.00	4.00	1.00	1.14				10	4	1.14	24	0.81				3.80					3.80
EXTRACCION VE-18	10.00	6.00	1.00	6.09				10	6	6.09	24	4.95				23.22					23.22
EXTRACCION VE-18	10.00	4.00	1.00	5.80				10	4	5.80	24	4.12				19.35					19.35
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	10.00	4.00	1.00	0.93				10	4	0.93	24	0.66				3.10					3.10
EXTRACCION VE-18	22.00	12.00	1.00	8.46				22	12	8.46	24	14.61				68.53					68.53
EXTRACCION VE-18	8.00	8.00	1.00	0.06				8	8	0.06	24	0.05				0.23					0.23

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-18	10.00	4.00	1.00	1.68				10	4	1.68	24	1.19				5.60					5.60
EXTRACCION VE-18	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-18	10.00	4.00	1.00	1.68				10	4	1.68	24	1.19				5.60					5.60
EXTRACCION VE-18	10.00	6.00	1.00	2.24				10	6	2.24	24	1.82				8.54					8.54
EXTRACCION VE-18	10.00	4.00	1.00	0.67				10	4	0.67	24	0.48				2.23					2.23
EXTRACCION VE-18	10.00	4.00	1.00	0.67				10	4	0.67	24	0.48				2.23					2.23
EXTRACCION VE-18	10.00	4.00	1.00	0.67				10	4	0.67	24	0.48				2.23					2.23
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	12.00	10.00	1.00	5.65				12	10	5.65	24	6.31				29.61					29.61
EXTRACCION VE-18	12.00	8.00	1.00	6.19				12	8	6.19	24	6.29				29.50					29.50
EXTRACCION VE-18	30.00	14.00	1.00	3.46				30	14	3.46	24	7.73				36.27					36.27
EXTRACCION VE-18	10.00	4.00	1.00	0.42				10	4	0.42	24	0.30				1.40					1.40
EXTRACCION VE-18	10.00	4.00	1.00	1.59				10	4	1.59	24	1.13				5.30					5.30
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-18	10.00	6.00	1.00	1.64				10	6	1.64	24	1.33				6.25					6.25
EXTRACCION VE-18	10.00	4.00	1.00	15.80				10	4	15.80	24	11.24				52.70					52.70
EXTRACCION VE-18	10.00	4.00	1.00	6.90				10	4	6.90	24	4.91				23.02					23.02
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	10.00	4.00	1.00	0.53				10	4	0.53	24	0.38				1.77					1.77
EXTRACCION VE-18	10.00	4.00	1.00	1.85				10	4	1.85	24	1.32				6.17					6.17
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-18	12.00	4.00	1.00	4.06				12	4	4.06	24	3.30				15.48					15.48
EXTRACCION VE-18	10.00	10.00	1.00	0.12				10	10	0.12	24	0.12				0.57					0.57
EXTRACCION VE-18	16.00	12.00	1.00	2.28				16	12	2.28	24	3.24				15.21					15.21
EXTRACCION VE-18	16.00	10.00	1.00	2.27				16	10	2.27	24	3.00				14.06					14.06
EXTRACCION VE-18	30.00	14.00	1.00	2.39				30	14	2.39	24	5.34				25.05					25.05
EXTRACCION VE-18	30.00	14.00	1.00	1.18				30	14	1.18	24	2.64				12.37					12.37
EXTRACCION VE-18	12.00	4.00	1.00	3.71				12	4	3.71	24	3.02				14.14					14.14
EXTRACCION VE-18	30.00	14.00	1.00	1.43				30	14	1.43	24	3.20				14.99					14.99
EXTRACCION VE-18	30.00	14.00	1.00	0.56				30	14	0.56	24	1.25				5.87					5.87
EXTRACCION VE-18	16.00	10.00	1.00	0.94				16	10	0.94	24	1.24				5.82					5.82
EXTRACCION VE-18	16.00	10.00	1.00	0.28				16	10	0.28	24	0.37				1.73					1.73
EXTRACCION VE-18	10.00	4.00	1.00	0.42				10	4	0.42	24	0.30				1.40					1.40
EXTRACCION VE-18	14.00	8.00	1.00	0.42				14	8	0.42	24	0.47				2.20					2.20
EXTRACCION VE-18	14.00	8.00	1.00	1.22				14	8	1.22	24	1.36				6.39					6.39
EXTRACCION VE-18	14.00	8.00	1.00	0.28				14	8	0.28	24	0.31				1.47					1.47
EXTRACCION VE-18	14.00	8.00	1.00	0.18				14	8	0.18	24	0.20				0.94					0.94
EXTRACCION VE-18	10.00	4.00	1.00	22.73				10	4	22.73	24	16.17				75.82					75.82
EXTRACCION VE-18	10.00	4.00	1.00	0.17				10	4	0.17	24	0.12				0.57					0.57
EXTRACCION VE-18	30.00	14.00	1.00	0.38				30	14	0.38	24	0.85				3.98					3.98
EXTRACCION VE-18	20.00	14.00	1.00	0.76				20	14	0.76	24	1.31				6.16					6.16
EXTRACCION VE-18	14.00	14.00	1.00	0.78				14	14	0.78	24	1.11				5.20					5.20
EXTRACCION VE-18	14.00	14.00	1.00	0.58				14	14	0.58	24	0.82				3.87					3.87
EXTRACCION VE-18	20.00	14.00	1.00	0.52				20	14	0.52	24	0.90				4.21					4.21
EXTRACCION VE-18	20.00	14.00	1.00	0.75				20	14	0.75	24	1.30				6.08					6.08
EXTRACCION VE-18	20.00	14.00	1.00	0.96				20	14	0.96	24	1.66				7.78					7.78
EXTRACCION VE-18	10.00	6.00	1.00	18.70				10	6	18.70	24	15.20				71.28					71.28
EXTRACCION VE-19	20.00	10.00	1.00	11.98				20	10	11.98	24	18.26				85.63					85.63
EXTRACCION VE-19	24.00	12.00	1.00	1.48				24	12	1.48	24	2.71				12.69					12.69
EXTRACCION VE-19	14.00	14.00	1.00	0.07				14	14	0.07	24	0.10				0.47					0.47
EXTRACCION VE-19	10.00	6.00	1.00	2.87				10	6	2.87	24	2.33				10.94					10.94
EXTRACCION VE-19	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-19	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-19	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-19	16.00	6.00	1.00	4.84				16	6	4.84	24	5.41				25.37					25.37
EXTRACCION VE-19	14.00	6.00	1.00	1.98				14	6	1.98	24	2.01				9.43					9.43
EXTRACCION VE-19	12.00	12.00	1.00	0.07				12	12	0.07	24	0.09				0.40					0.40
EXTRACCION VE-19	10.00	6.00	1.00	2.92				10	6	2.92	24	2.37				11.13					11.13
EXTRACCION VE-19	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-19	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-19	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-19	10.00	4.00	1.00	3.19				10	4	3.19	24	2.27				10.64					10.64
EXTRACCION VE-19	10.00	4.00	1.00	1.86				10	4	1.86	24	1.32				6.20					6.20
EXTRACCION VE-19	12.00	8.00	1.00	2.88				12	8	2.88	24	2.93				13.72					13.72
EXTRACCION VE-19	8.00	8.00	1.00	0.05				8	8	0.05	24	0.04				0.19					0.19
EXTRACCION VE-19	10.00	4.00	1.00	0.30				10	4	0.30	24	0.21				1.00					1.00
EXTRACCION VE-19	10.00	4.00	1.00	2.37				10	4	2.37	24	1.69				7.91					7.91
EXTRACCION VE-19	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-19	12.00	8.00	1.00	0.13				12	8	0.13	24	0.13				0.62					0.62
EXTRACCION VE-19	12.00	8.00	1.00	1.21				12	8	1.21	24	1.23				5.77					5.77
EXTRACCION VE-19	14.00	6.00	1.00	1.10				14	6	1.10	24	1.12				5.24					5.24
EXTRACCION VE-19	14.00	6.00	1.00	1.97				14	6	1.97	24	2.00				9.39					9.39
EXTRACCION VE-19	12.00	12.00	1.00	0.07				12	12	0.07	24	0.09				0.40					0.40
EXTRACCION VE-19	20.00	10.00	1.00	0.40				20	10	0.40	24	0.61				2.86					2.86
EXTRACCION VE-19	24.00	12.00	1.00	1.28				24	12	1.28	24	2.34				10.98					10.98
EXTRACCION VE-19	24.00	12.00	1.00	0.61				24	12	0.61	24	1.12				5.23					5.23
EXTRACCION VE-19	24.00	12.00	1.00	0.37				24	12	0.37	24	0.68				3.17					3.17
EXTRACCION VE-19	24.00	12.00	1.00	0.94				24	12	0.94	24	1.72				8.06					8.06
EXTRACCION VE-19	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-19	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-20	16.00	6.00	1.00	2.81				16	6	2.81	24	3.14				14.73					14.73
EXTRACCION VE-20	14.00	14.00	1.00	0.03				14	14	0.03	24	0.04				0.20					0.20
EXTRACCION VE-20	16.00	6.00	1.00	1.36				16	6	1.36	24	1.52				7.13					7.13
EXTRACCION VE-20	16.00	6.00	1.00	2.86				16	6	2.86	24	3.20				14.99					14.99
EXTRACCION VE-20	14.00	14.00	1.00	0.04				14	14	0.04	24	0.06				0.27					0.27
EXTRACCION VE-20	16.00	10.00	1.00	4.51				16	10	4.51	24	5.96				27.94					27.94
EXTRACCION VE-20	24.00	14.00	1.00	0.40				24	14	0.40	24	0.77				3.62					3.62
EXTRACCION VE-20	24.00	14.00	1.00	1.90				24	14	1.90	24	3.67				17.20					17.20
EXTRACCION VE-20	24.00	14.00	1.00	1.19				24	14	1.19	24	2.30				10.77					10.77
EXTRACCION VE-20	24.00	14.00	1.00	0.70				24	14	0.70	24	1.35				6.34					6.34
EXTRACCION VE-20	24.00	14.00	1.00	4.12				24	14	4.12	24	7.95				37.30					37.30
EXTRACCION VE-20	24.00	14.00	1.00	0.56				24	14	0.56	24	1.08				5.07					5.07
EXTRACCION VE-20	14.00	6.00	1.00	2.86				14	6	2.86	24	2.91				13.63					13.63
EXTRACCION VE-20	12.00	12.00	1.00	0.06				12	12	0.06	24	0.07				0.34					0.34
EXTRACCION VE-20	14.00	6.00	1.00	2.86				14	6	2.86	24	2.91				13.63					13.63
EXTRACCION VE-20	12.00	12.00	1.00	0.06				12	12	0.06	24	0.07				0.34					0.34
EXTRACCION VE-20	14.00	6.00	1.00	2.86				14	6	2.86	24	2.91				13.63					13.63
EXTRACCION VE-20	12.00	12.00	1.00	0.06				12	12	0.06	24	0.07				0.34					0.34
EXTRACCION VE-20	14.00	6.00	1.00	2.52				14	6	2.52	24	2.56				12.01					12.01
EXTRACCION VE-20	12.00	12.00	1.00	0.06				12	12	0.06	24	0.07				0.34					0.34
EXTRACCION VE-20	16.00	6.00	1.00	2.25				16	6	2.25	24	2.51				11.79					11.79
EXTRACCION VE-20	14.00	6.00	1.00	1.88				14	6	1.88	24	1.91				8.96					8.96
EXTRACCION VE-20	14.00	6.00	1.00	0.29				14	6	0.29	24	0.29				1.38					1.38
EXTRACCION VE-20	14.00	6.00	1.00	0.29				14	6	0.29	24	0.29				1.38					1.38
EXTRACCION VE-20	14.00	6.00	1.00	1.80				14	6	1.80	24	1.83				8.58					8.58
EXTRACCION VE-20	16.00	10.00	1.00	3.59				16	10	3.59	24	4.74				22.24					22.24
EXTRACCION VE-20	18.00	12.00	1.00	4.83				18	12	4.83	24	7.36				34.52					34.52
EXTRACCION VE-20	24.00	12.00	1.00	5.45				24	12	5.45	24	9.97				46.75					46.75
EXTRACCION VE-20	24.00	14.00	1.00	1.25				24	14	1.25	24	2.41				11.32					11.32
EXTRACCION VE-20	24.00	14.00	1.00	0.03				24	14	0.03	24	0.06				0.27					0.27
EXTRACCION VE-20	24.00	12.00	1.00	0.37				24	12	0.37	24	0.68				3.17					3.17
EXTRACCION VE-20	24.00	12.00	1.00	0.40				24	12	0.40	24	0.73				3.43					3.43
EXTRACCION VE-20	24.00	14.00	1.00	4.94				24	14	4.94	24	9.54				44.72					44.72

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-20	24.00	14.00	1.00	0.93				24	14	0.93	24	1.80				8.42					8.42
EXTRACCION VE-20	24.00	14.00	1.00	0.32				24	14	0.32	24	0.62				2.90					2.90
EXTRACCION VE-20	24.00	14.00	1.00	0.50				24	14	0.50	24	0.97				4.53					4.53
EXTRACCION VE-20	16.00	6.00	1.00	2.25				16	6	2.25	24	2.51				11.79					11.79
EXTRACCION VE-20	24.00	14.00	1.00	0.52				24	14	0.52	24	1.00				4.71					4.71
EXTRACCION VE-21	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-21	10.00	4.00	1.00	0.87				10	4	0.87	24	0.62				2.90					2.90
EXTRACCION VE-21	10.00	4.00	1.00	2.96				10	4	2.96	24	2.11				9.87					9.87
EXTRACCION VE-21	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-21	10.00	4.00	1.00	0.54				10	4	0.54	24	0.38				1.80					1.80
EXTRACCION VE-21	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-21	10.00	4.00	1.00	0.81				10	4	0.81	24	0.58				2.70					2.70
EXTRACCION VE-21	10.00	6.00	1.00	0.06				10	6	0.06	24	0.05				0.23					0.23
EXTRACCION VE-21	10.00	6.00	1.00	22.52				10	6	22.52	24	18.30				85.85					85.85
EXTRACCION VE-21	10.00	6.00	1.00	5.07				10	6	5.07	24	4.12				19.33					19.33
EXTRACCION VE-21	10.00	6.00	1.00	2.41				10	6	2.41	24	1.96				9.19					9.19
EXTRACCION VE-21	10.00	6.00	1.00	1.13				10	6	1.13	24	0.92				4.31					4.31
EXTRACCION VE-21	10.00	6.00	1.00	3.09				10	6	3.09	24	2.51				11.78					11.78
EXTRACCION VE-21	10.00	6.00	1.00	3.83				10	6	3.83	24	3.11				14.60					14.60
EXTRACCION VE-21	10.00	6.00	1.00	0.81				10	6	0.81	24	0.66				3.09					3.09
EXTRACCION VE-21	10.00	6.00	1.00	1.07				10	6	1.07	24	0.87				4.08					4.08
EXTRACCION VE-21	10.00	6.00	1.00	0.93				10	6	0.93	24	0.76				3.55					3.55
EXTRACCION VE-21	10.00	6.00	1.00	0.22				10	6	0.22	24	0.18				0.84					0.84
EXTRACCION VE-21	10.00	6.00	1.00	0.23				10	6	0.23	24	0.19				0.88					0.88
EXTRACCION VE-21	10.00	6.00	1.00	2.72				10	6	2.72	24	2.21				10.37					10.37
EXTRACCION VE-21	10.00	6.00	1.00	0.54				10	6	0.54	24	0.44				2.06					2.06
EXTRACCION VE-21	10.00	6.00	1.00	0.17				10	6	0.17	24	0.14				0.65					0.65
EXTRACCION VE-21	10.00	6.00	1.00	0.14				10	6	0.14	24	0.11				0.53					0.53
EXTRACCION VE-21	10.00	6.00	1.00	0.19				10	6	0.19	24	0.15				0.72					0.72
EXTRACCION VE-24	10.00	4.00	1.00	2.27				10	4	2.27	24	1.61				7.57					7.57
EXTRACCION VE-24	10.00	6.00	1.00	0.25				10	6	0.25	24	0.20				0.95					0.95
EXTRACCION VE-24	26.00	10.00	1.00	7.89				26	10	7.89	24	14.43				67.67					67.67
EXTRACCION VE-24	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-24	10.00	4.00	1.00	2.15				10	4	2.15	24	1.53				7.17					7.17
EXTRACCION VE-24	10.00	4.00	1.00	1.11				10	4	1.11	24	0.79				3.70					3.70
EXTRACCION VE-24	10.00	4.00	1.00	1.78				10	4	1.78	24	1.27				5.94					5.94
EXTRACCION VE-24	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-24	10.00	4.00	1.00	1.08				10	4	1.08	24	0.77				3.60					3.60
EXTRACCION VE-24	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-24	10.00	4.00	1.00	0.63				10	4	0.63	24	0.45				2.10					2.10
EXTRACCION VE-24	10.00	4.00	1.00	1.30				10	4	1.30	24	0.92				4.34					4.34
EXTRACCION VE-24	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-24	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-24	10.00	4.00	1.00	1.34				10	4	1.34	24	0.95				4.47					4.47
EXTRACCION VE-24	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-24	10.00	4.00	1.00	1.21				10	4	1.21	24	0.86				4.04					4.04
EXTRACCION VE-24	10.00	4.00	1.00	0.83				10	4	0.83	24	0.59				2.77					2.77
EXTRACCION VE-24	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-24	10.00	4.00	1.00	1.52				10	4	1.52	24	1.08				5.07					5.07
EXTRACCION VE-24	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-24	10.00	4.00	1.00	2.24				10	4	2.24	24	1.59				7.47					7.47
EXTRACCION VE-24	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-24	10.00	4.00	1.00	0.91				10	4	0.91	24	0.65				3.04					3.04
EXTRACCION VE-24	14.00	8.00	1.00	6.40				14	8	6.40	24	7.15				33.55					33.55
EXTRACCION VE-24	18.00	8.00	1.00	1.56				18	8	1.56	24	2.06				9.66					9.66
EXTRACCION VE-24	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-24	10.00	4.00	1.00	0.89				10	4	0.89	24	0.63				2.97					2.97
EXTRACCION VE-24	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-24	8.00	8.00	1.00	0.07				8	8	0.07	24	0.06				0.27					0.27

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-24	8.00	8.00	1.00	0.07				8	8	0.07	24	0.06				0.27					0.27
EXTRACCION VE-24	10.00	4.00	1.00	0.50				10	4	0.50	24	0.36				1.67					1.67
EXTRACCION VE-24	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-24	10.00	4.00	1.00	1.28				10	4	1.28	24	0.91				4.27					4.27
EXTRACCION VE-24	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-24	8.00	8.00	1.00	0.07				8	8	0.07	24	0.06				0.27					0.27
EXTRACCION VE-24	10.00	4.00	1.00	2.79				10	4	2.79	24	1.98				9.31					9.31
EXTRACCION VE-24	10.00	4.00	1.00	3.23				10	4	3.23	24	2.30				10.77					10.77
EXTRACCION VE-24	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-24	10.00	4.00	1.00	2.70				10	4	2.70	24	1.92				9.01					9.01
EXTRACCION VE-24	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-24	10.00	4.00	1.00	11.37				10	4	11.37	24	8.09				37.92					37.92
EXTRACCION VE-24	10.00	4.00	1.00	1.97				10	4	1.97	24	1.40				6.57					6.57
EXTRACCION VE-24	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-24	22.00	14.00	1.00	2.01				22	14	2.01	24	3.68				17.24					17.24
EXTRACCION VE-24	10.00	4.00	1.00	2.77				10	4	2.77	24	1.97				9.24					9.24
EXTRACCION VE-24	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-24	22.00	14.00	1.00	18.48				22	14	18.48	24	33.80				158.50					158.50
EXTRACCION VE-24	10.00	6.00	1.00	2.66				10	6	2.66	24	2.16				10.14					10.14
EXTRACCION VE-24	14.00	6.00	1.00	3.95				14	6	3.95	24	4.01				18.82					18.82
EXTRACCION VE-24	10.00	4.00	1.00	2.17				10	4	2.17	24	1.54				7.24					7.24
EXTRACCION VE-24	16.00	8.00	1.00	14.59				16	8	14.59	24	17.79				83.43					83.43
EXTRACCION VE-24	10.00	4.00	1.00	0.52				10	4	0.52	24	0.37				1.73					1.73
EXTRACCION VE-24	10.00	6.00	1.00	1.28				10	6	1.28	24	1.04				4.88					4.88
EXTRACCION VE-24	10.00	4.00	1.00	1.39				10	4	1.39	24	0.99				4.64					4.64
EXTRACCION VE-24	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-24	10.00	4.00	1.00	8.17				10	4	8.17	24	5.81				27.25					27.25
EXTRACCION VE-24	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-24	10.00	6.00	1.00	8.01				10	6	8.01	24	6.51				30.53					30.53
EXTRACCION VE-24	16.00	10.00	1.00	10.00				16	10	10.00	24	13.21				61.95					61.95
EXTRACCION VE-24	22.00	14.00	1.00	0.78				22	14	0.78	24	1.43				6.69					6.69
EXTRACCION VE-24	22.00	14.00	1.00	2.28				22	14	2.28	24	4.17				19.56					19.56
EXTRACCION VE-24	22.00	14.00	1.00	0.55				22	14	0.55	24	1.01				4.72					4.72
EXTRACCION VE-24	10.00	4.00	1.00	0.28				10	4	0.28	24	0.20				0.93					0.93
EXTRACCION VE-24	10.00	4.00	1.00	0.91				10	4	0.91	24	0.65				3.04					3.04
EXTRACCION VE-24	10.00	4.00	1.00	0.14				10	4	0.14	24	0.10				0.47					0.47
EXTRACCION VE-24	10.00	4.00	1.00	0.14				10	4	0.14	24	0.10				0.47					0.47
EXTRACCION VE-24	8.00	8.00	1.00	0.07				8	8	0.07	24	0.06				0.27					0.27
EXTRACCION VE-24	16.00	10.00	1.00	0.30				16	10	0.30	24	0.40				1.86					1.86
EXTRACCION VE-24	10.00	6.00	1.00	0.24				10	6	0.24	24	0.20				0.91					0.91
EXTRACCION VE-24	10.00	6.00	1.00	0.81				10	6	0.81	24	0.66				3.09					3.09
EXTRACCION VE-24	10.00	6.00	1.00	0.16				10	6	0.16	24	0.13				0.61					0.61
EXTRACCION VE-24	10.00	6.00	1.00	0.16				10	6	0.16	24	0.13				0.61					0.61
EXTRACCION VE-24	14.00	6.00	1.00	0.10				14	6	0.10	24	0.10				0.48					0.48
EXTRACCION VE-24	14.00	6.00	1.00	1.82				14	6	1.82	24	1.85				8.67					8.67
EXTRACCION VE-24	14.00	6.00	1.00	0.29				14	6	0.29	24	0.29				1.38					1.38
EXTRACCION VE-24	14.00	6.00	1.00	0.29				14	6	0.29	24	0.29				1.38					1.38
EXTRACCION VE-24	10.00	6.00	1.00	1.08				10	6	1.08	24	0.88				4.12					4.12
EXTRACCION VE-24	10.00	6.00	1.00	1.80				10	6	1.80	24	1.46				6.86					6.86
EXTRACCION VE-24	10.00	6.00	1.00	0.14				10	6	0.14	24	0.11				0.53					0.53
EXTRACCION VE-24	10.00	6.00	1.00	0.14				10	6	0.14	24	0.11				0.53					0.53
EXTRACCION VE-24	24.00	12.00	1.00	4.47				24	12	4.47	24	8.17				38.34					38.34
EXTRACCION VE-24	24.00	12.00	1.00	1.85				24	12	1.85	24	3.38				15.87					15.87
EXTRACCION VE-25	14.00	6.00	1.00	1.22				14	6	1.22	24	1.24				5.81					5.81
EXTRACCION VE-25	12.00	12.00	1.00	0.07				12	12	0.07	24	0.09				0.40					0.40
EXTRACCION VE-25	12.00	4.00	1.00	3.15				12	4	3.15	24	2.56				12.01					12.01
EXTRACCION VE-25	10.00	10.00	1.00	0.09				10	10	0.09	24	0.09				0.43					0.43
EXTRACCION VE-25	14.00	6.00	1.00	2.34				14	6	2.34	24	2.38				11.15					11.15
EXTRACCION VE-25	24.00	12.00	1.00	2.60				24	12	2.60	24	4.75				22.30					22.30

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-25	8.00	8.00	1.00	0.04				8	8	0.04	24	0.03				0.15					0.15
EXTRACCION VE-25	14.00	8.00	1.00	8.08				14	8	8.08	24	9.03				42.35					42.35
EXTRACCION VE-25	14.00	6.00	1.00	1.57				14	6	1.57	24	1.60				7.48					7.48
EXTRACCION VE-25	12.00	12.00	1.00	0.07				12	12	0.07	24	0.09				0.40					0.40
EXTRACCION VE-25	14.00	10.00	1.00	4.32				14	10	4.32	24	5.27				24.70					24.70
EXTRACCION VE-25	10.00	4.00	1.00	1.81				10	4	1.81	24	1.29				6.04					6.04
EXTRACCION VE-25	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-25	10.00	10.00	1.00	0.10				10	10	0.10	24	0.10				0.48					0.48
EXTRACCION VE-25	14.00	6.00	1.00	0.77				14	6	0.77	24	0.78				3.67					3.67
EXTRACCION VE-25	18.00	10.00	1.00	2.94				18	10	2.94	24	4.18				19.61					19.61
EXTRACCION VE-25	8.00	8.00	1.00	0.02				8	8	0.02	24	0.02				0.08					0.08
EXTRACCION VE-25	10.00	10.00	1.00	0.02				10	10	0.02	24	0.02				0.10					0.10
EXTRACCION VE-25	20.00	12.00	1.00	18.17				20	12	18.17	24	29.54				138.53					138.53
EXTRACCION VE-25	24.00	12.00	1.00	0.83				24	12	0.83	24	1.52				7.12					7.12
EXTRACCION VE-25	24.00	12.00	1.00	17.40				24	12	17.40	24	31.82				149.24					149.24
EXTRACCION VE-25	12.00	24.00	1.00	0.83				12	24	0.83	24	1.52				7.12					7.12
EXTRACCION VE-25	12.00	24.00	1.00	0.44				12	24	0.44	24	0.80				3.77					3.77
EXTRACCION VE-25	24.00	12.00	1.00	0.29				24	12	0.29	24	0.53				2.49					2.49
EXTRACCION VE-25	24.00	12.00	1.00	18.25				24	12	18.25	24	33.38				156.53					156.53
EXTRACCION VE-25	24.00	12.00	1.00	0.13				24	12	0.13	24	0.24				1.12					1.12
EXTRACCION VE-25	24.00	12.00	1.00	0.21				24	12	0.21	24	0.38				1.80					1.80
EXTRACCION VE-26	10.00	4.00	1.00	1.72				10	4	1.72	24	1.22				5.74					5.74
EXTRACCION VE-26	10.00	4.00	1.00	1.40				10	4	1.40	24	1.00				4.67					4.67
EXTRACCION VE-26	18.00	10.00	1.00	3.36				18	10	3.36	24	4.78				22.41					22.41
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	2.00				10	4	2.00	24	1.42				6.67					6.67
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	1.11				10	4	1.11	24	0.79				3.70					3.70
EXTRACCION VE-26	10.00	4.00	1.00	1.11				10	4	1.11	24	0.79				3.70					3.70
EXTRACCION VE-26	10.00	4.00	1.00	1.11				10	4	1.11	24	0.79				3.70					3.70
EXTRACCION VE-26	10.00	4.00	1.00	1.11				10	4	1.11	24	0.79				3.70					3.70
EXTRACCION VE-26	10.00	4.00	1.00	1.11				10	4	1.11	24	0.79				3.70					3.70
EXTRACCION VE-26	10.00	4.00	1.00	1.09				10	4	1.09	24	0.78				3.64					3.64
EXTRACCION VE-26	10.00	4.00	1.00	1.09				10	4	1.09	24	0.78				3.64					3.64
EXTRACCION VE-26	10.00	4.00	1.00	1.09				10	4	1.09	24	0.78				3.64					3.64
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	24.00	12.00	1.00	3.03				24	12	3.03	24	5.54				25.99					25.99
EXTRACCION VE-26	18.00	10.00	1.00	6.29				18	10	6.29	24	8.95				41.96					41.96
EXTRACCION VE-26	10.00	4.00	1.00	1.86				10	4	1.86	24	1.32				6.20					6.20
EXTRACCION VE-26	10.00	4.00	1.00	4.47				10	4	4.47	24	3.18				14.91					14.91
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	14.00	10.00	1.00	9.10				14	10	9.10	24	11.09				52.03					52.03
EXTRACCION VE-26	10.00	4.00	1.00	2.75				10	4	2.75	24	1.96				9.17					9.17
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	0.76				10	4	0.76	24	0.54				2.54					2.54
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	0.76				10	4	0.76	24	0.54				2.54					2.54
EXTRACCION VE-26	10.00	4.00	1.00	0.76				10	4	0.76	24	0.54				2.54					2.54
EXTRACCION VE-26	10.00	4.00	1.00	0.71				10	4	0.71	24	0.50				2.37					2.37
EXTRACCION VE-26	10.00	4.00	1.00	0.71				10	4	0.71	24	0.50				2.37					2.37

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-26	10.00	4.00	1.00	0.71				10	4	0.71	24	0.50				2.37					2.37
EXTRACCION VE-26	10.00	4.00	1.00	0.71				10	4	0.71	24	0.50				2.37					2.37
EXTRACCION VE-26	10.00	4.00	1.00	0.71				10	4	0.71	24	0.50				2.37					2.37
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	0.57				10	4	0.57	24	0.41				1.90					1.90
EXTRACCION VE-26	10.00	4.00	1.00	1.88				10	4	1.88	24	1.34				6.27					6.27
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	2.08				10	4	2.08	24	1.48				6.94					6.94
EXTRACCION VE-26	10.00	4.00	1.00	0.83				10	4	0.83	24	0.59				2.77					2.77
EXTRACCION VE-26	10.00	4.00	1.00	6.48				10	4	6.48	24	4.61				21.61					21.61
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	1.31				10	4	1.31	24	0.93				4.37					4.37
EXTRACCION VE-26	10.00	4.00	1.00	0.36				10	4	0.36	24	0.26				1.20					1.20
EXTRACCION VE-26	10.00	4.00	1.00	5.17				10	4	5.17	24	3.68				17.24					17.24
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	2.01				10	4	2.01	24	1.43				6.70					6.70
EXTRACCION VE-26	10.00	4.00	1.00	4.98				10	4	4.98	24	3.54				16.61					16.61
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	0.73				10	4	0.73	24	0.52				2.43					2.43
EXTRACCION VE-26	10.00	4.00	1.00	1.26				10	4	1.26	24	0.90				4.20					4.20
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	1.13				10	4	1.13	24	0.80				3.77					3.77
EXTRACCION VE-26	10.00	4.00	1.00	0.82				10	4	0.82	24	0.58				2.74					2.74
EXTRACCION VE-26	20.00	10.00	1.00	3.31				20	10	3.31	24	5.04				23.66					23.66
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	1.13				10	4	1.13	24	0.80				3.77					3.77
EXTRACCION VE-26	10.00	4.00	1.00	1.13				10	4	1.13	24	0.80				3.77					3.77
EXTRACCION VE-26	10.00	4.00	1.00	1.13				10	4	1.13	24	0.80				3.77					3.77
EXTRACCION VE-26	10.00	4.00	1.00	1.13				10	4	1.13	24	0.80				3.77					3.77
EXTRACCION VE-26	10.00	4.00	1.00	1.13				10	4	1.13	24	0.80				3.77					3.77
EXTRACCION VE-26	10.00	4.00	1.00	1.13				10	4	1.13	24	0.80				3.77					3.77
EXTRACCION VE-26	10.00	4.00	1.00	1.08				10	4	1.08	24	0.77				3.60					3.60
EXTRACCION VE-26	10.00	4.00	1.00	1.08				10	4	1.08	24	0.77				3.60					3.60
EXTRACCION VE-26	10.00	4.00	1.00	1.08				10	4	1.08	24	0.77				3.60					3.60
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	24.00	12.00	1.00	2.96				24	12	2.96	24	5.41				25.39					25.39
EXTRACCION VE-26	16.00	10.00	1.00	6.24				16	10	6.24	24	8.24				38.65					38.65
EXTRACCION VE-26	10.00	4.00	1.00	1.90				10	4	1.90	24	1.35				6.34					6.34
EXTRACCION VE-26	10.00	4.00	1.00	4.47				10	4	4.47	24	3.18				14.91					14.91
EXTRACCION VE-26	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-26	10.00	4.00	1.00	3.00				10	4	3.00	24	2.13				10.01					10.01

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-26	10.00	4.00	1.00	2.99				10	4	2.99	24	2.13				9.97					9.97
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	0.74				10	4	0.74	24	0.53				2.47					2.47
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	0.74				10	4	0.74	24	0.53				2.47					2.47
EXTRACCION VE-26	10.00	4.00	1.00	0.71				10	4	0.71	24	0.50				2.37					2.37
EXTRACCION VE-26	10.00	4.00	1.00	0.71				10	4	0.71	24	0.50				2.37					2.37
EXTRACCION VE-26	10.00	4.00	1.00	0.71				10	4	0.71	24	0.50				2.37					2.37
EXTRACCION VE-26	10.00	4.00	1.00	0.69				10	4	0.69	24	0.49				2.30					2.30
EXTRACCION VE-26	10.00	4.00	1.00	0.69				10	4	0.69	24	0.49				2.30					2.30
EXTRACCION VE-26	10.00	4.00	1.00	0.69				10	4	0.69	24	0.49				2.30					2.30
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	1.88				10	4	1.88	24	1.34				6.27					6.27
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	2.62				10	4	2.62	24	1.86				8.74					8.74
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	0.50				10	4	0.50	24	0.36				1.67					1.67
EXTRACCION VE-26	10.00	4.00	1.00	8.10				10	4	8.10	24	5.76				27.02					27.02
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	0.72				10	4	0.72	24	0.51				2.40					2.40
EXTRACCION VE-26	10.00	4.00	1.00	1.33				10	4	1.33	24	0.95				4.44					4.44
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	1.13				10	4	1.13	24	0.80				3.77					3.77
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	0.74				10	4	0.74	24	0.53				2.47					2.47
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	0.74				10	4	0.74	24	0.53				2.47					2.47
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	4.12				10	4	4.12	24	2.93				13.74					13.74
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	5.10				10	4	5.10	24	3.63				17.01					17.01
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	2.39				10	4	2.39	24	1.70				7.97					7.97
EXTRACCION VE-26	10.00	4.00	1.00	3.13				10	4	3.13	24	2.23				10.44					10.44
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	24.00	12.00	1.00	3.39				24	12	3.39	24	6.20				29.08					29.08
EXTRACCION VE-26	10.00	4.00	1.00	1.20				10	4	1.20	24	0.85				4.00					4.00
EXTRACCION VE-26	10.00	4.00	1.00	1.42				10	4	1.42	24	1.01				4.74					4.74
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-26	10.00	6.00	1.00	3.19				10	6	3.19	24	2.59				12.16					12.16
EXTRACCION VE-26	16.00	6.00	1.00	6.39				16	6	6.39	24	7.14				33.49					33.49
EXTRACCION VE-26	16.00	8.00	1.00	10.74				16	8	10.74	24	13.09				61.41					61.41
EXTRACCION VE-26	16.00	10.00	1.00	14.52				16	10	14.52	24	19.18				89.94					89.94
EXTRACCION VE-26	20.00	10.00	1.00	8.65				20	10	8.65	24	13.18				61.83					61.83
EXTRACCION VE-26	12.00	6.00	1.00	1.71				12	6	1.71	24	1.56				7.33					7.33
EXTRACCION VE-26	14.00	8.00	1.00	10.40				14	8	10.40	24	11.62				54.51					54.51
EXTRACCION VE-26	16.00	8.00	1.00	12.85				16	8	12.85	24	15.67				73.48					73.48
EXTRACCION VE-26	10.00	4.00	1.00	0.69				10	4	0.69	24	0.49				2.30					2.30

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-26	10.00	4.00	1.00	0.71				10	4	0.71	24	0.50				2.37					2.37
EXTRACCION VE-26	10.00	4.00	1.00	0.12				10	4	0.12	24	0.09				0.40					0.40
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	1.20				10	4	1.20	24	0.85				4.00					4.00
EXTRACCION VE-26	10.00	4.00	1.00	1.70				10	4	1.70	24	1.21				5.67					5.67
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-26	10.00	6.00	1.00	2.91				10	6	2.91	24	2.37				11.09					11.09
EXTRACCION VE-26	10.00	4.00	1.00	0.70				10	4	0.70	24	0.50				2.33					2.33
EXTRACCION VE-26	10.00	4.00	1.00	1.00				10	4	1.00	24	0.71				3.34					3.34
EXTRACCION VE-26	10.00	4.00	1.00	1.03				10	4	1.03	24	0.73				3.44					3.44
EXTRACCION VE-26	16.00	6.00	1.00	6.13				16	6	6.13	24	6.85				32.13					32.13
EXTRACCION VE-26	16.00	8.00	1.00	10.96				16	8	10.96	24	13.36				62.67					62.67
EXTRACCION VE-26	16.00	10.00	1.00	13.98				16	10	13.98	24	18.46				86.60					86.60
EXTRACCION VE-26	18.00	10.00	1.00	8.68				18	10	8.68	24	12.35				57.90					57.90
EXTRACCION VE-26	10.00	4.00	1.00	3.00				10	4	3.00	24	2.13				10.01					10.01
EXTRACCION VE-26	10.00	6.00	1.00	8.39				10	6	8.39	24	6.82				31.98					31.98
EXTRACCION VE-26	14.00	8.00	1.00	12.16				14	8	12.16	24	13.59				63.74					63.74
EXTRACCION VE-26	10.00	4.00	1.00	0.19				10	4	0.19	24	0.14				0.63					0.63
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	6.00	1.00	3.89				10	6	3.89	24	3.16				14.83					14.83
EXTRACCION VE-26	32.00	16.00	1.00	10.90				32	16	10.90	22	26.58				149.37			149.37		
EXTRACCION VE-26	10.00	4.00	1.00	1.31				10	4	1.31	24	0.93				4.37					4.37
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	10.00	4.00	1.00	1.40				10	4	1.40	24	1.00				4.67					4.67
EXTRACCION VE-26	10.00	6.00	1.00	2.38				10	6	2.38	24	1.93				9.07					9.07
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	32.00	16.00	1.00	0.87				32	16	0.87	22	2.12				11.92			11.92		
EXTRACCION VE-26	32.00	16.00	1.00	0.15				32	16	0.15	22	0.37				2.06			2.06		
EXTRACCION VE-26	32.00	16.00	1.00	0.50				32	16	0.50	22	1.22				6.85			6.85		
EXTRACCION VE-26	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-26	32.00	16.00	1.00	2.96				32	16	2.96	22	7.22				40.56			40.56		
EXTRACCION VE-26	12.00	6.00	1.00	0.83				12	6	0.83	24	0.76				3.56					3.56
EXTRACCION VE-26	12.00	6.00	1.00	10.28				12	6	10.28	24	9.40				44.09					44.09
EXTRACCION VE-26	12.00	6.00	1.00	0.27				12	6	0.27	24	0.25				1.16					1.16
EXTRACCION VE-26	12.00	6.00	1.00	0.27				12	6	0.27	24	0.25				1.16					1.16
EXTRACCION VE-27	12.00	4.00	1.00	2.64				12	4	2.64	24	2.15				10.06					10.06
EXTRACCION VE-27	10.00	4.00	1.00	1.52				10	4	1.52	24	1.08				5.07					5.07
EXTRACCION VE-27	10.00	4.00	1.00	0.42				10	4	0.42	24	0.30				1.40					1.40
EXTRACCION VE-27	12.00	8.00	1.00	2.62				12	8	2.62	24	2.66				12.48					12.48
EXTRACCION VE-27	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-27	10.00	4.00	1.00	0.67				10	4	0.67	24	0.48				2.23					2.23
EXTRACCION VE-27	10.00	4.00	1.00	0.25				10	4	0.25	24	0.18				0.83					0.83
EXTRACCION VE-27	12.00	8.00	1.00	14.95				12	8	14.95	24	15.19				71.24					71.24
EXTRACCION VE-27	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-27	10.00	10.00	1.00	0.12				10	10	0.12	24	0.12				0.57					0.57
EXTRACCION VE-27	12.00	8.00	1.00	0.68				12	8	0.68	24	0.69				3.24					3.24
EXTRACCION VE-27	12.00	8.00	1.00	0.80				12	8	0.80	24	0.81				3.81					3.81
EXTRACCION VE-27	12.00	8.00	1.00	0.16				12	8	0.16	24	0.16				0.76					0.76
EXTRACCION VE-27	12.00	8.00	1.00	0.24				12	8	0.24	24	0.24				1.14					1.14
EXTRACCION VE-28	12.00	6.00	1.00	1.91				12	6	1.91	24	1.75				8.19					8.19
EXTRACCION VE-28	10.00	4.00	1.00	3.17				10	4	3.17	24	2.25				10.57					10.57
EXTRACCION VE-28	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-28	12.00	4.00	1.00	3.18				12	4	3.18	24	2.58				12.12					12.12
EXTRACCION VE-28	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-28	12.00	8.00	1.00	4.07				12	8	4.07	24	4.14				19.39					19.39
EXTRACCION VE-28	12.00	8.00	1.00	1.82				12	8	1.82	24	1.85				8.67					8.67

TABLA DE DATOS

																	CALIBRE				
DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAM ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-28	12.00	8.00	1.00	1.33				12	8	1.33	24	1.35				6.34					6.34
EXTRACCION VE-28	12.00	8.00	1.00	14.81				12	8	14.81	24	15.05				70.57					70.57
EXTRACCION VE-28	12.00	6.00	1.00	1.92				12	6	1.92	24	1.76				8.23					8.23
EXTRACCION VE-28	10.00	10.00	1.00	0.12				10	10	0.12	24	0.12				0.57					0.57
EXTRACCION VE-28	12.00	8.00	1.00	1.83				12	8	1.83	24	1.86				8.72					8.72
EXTRACCION VE-28	12.00	8.00	1.00	0.38				12	8	0.38	24	0.39				1.81					1.81
EXTRACCION VE-29	12.00	8.00	1.00	3.61				12	8	3.61	24	3.67				17.20					17.20
EXTRACCION VE-29	10.00	4.00	1.00	2.67				10	4	2.67	24	1.90				8.91					8.91
EXTRACCION VE-29	12.00	4.00	1.00	1.83				12	4	1.83	24	1.49				6.98					6.98
EXTRACCION VE-29	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-29	8.00	8.00	1.00	0.05				8	8	0.05	24	0.04				0.19					0.19
EXTRACCION VE-29	12.00	8.00	1.00	9.23				12	8	9.23	24	9.38				43.98					43.98
EXTRACCION VE-29	12.00	8.00	1.00	1.98				12	8	1.98	24	2.01				9.43					9.43
EXTRACCION VE-29	12.00	8.00	1.00	14.60				12	8	14.60	24	14.83				69.57					69.57
EXTRACCION VE-29	10.00	10.00	1.00	0.12				10	10	0.12	24	0.12				0.57					0.57
EXTRACCION VE-29	12.00	8.00	1.00	1.35				12	8	1.35	24	1.37				6.43					6.43
EXTRACCION VE-29	8.00	12.00	1.00	0.59				8	12	0.59	24	0.60				2.81					2.81
EXTRACCION VE-30	12.00	8.00	1.00	3.60				12	8	3.60	24	3.66				17.15					17.15
EXTRACCION VE-30	10.00	4.00	1.00	2.67				10	4	2.67	24	1.90				8.91					8.91
EXTRACCION VE-30	12.00	4.00	1.00	1.83				12	4	1.83	24	1.49				6.98					6.98
EXTRACCION VE-30	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-30	8.00	8.00	1.00	0.07				8	8	0.07	24	0.06				0.27					0.27
EXTRACCION VE-30	12.00	8.00	1.00	9.56				12	8	9.56	24	9.71				45.55					45.55
EXTRACCION VE-30	12.00	8.00	1.00	1.97				12	8	1.97	24	2.00				9.39					9.39
EXTRACCION VE-30	12.00	8.00	1.00	10.30				12	8	10.30	24	10.46				49.08					49.08
EXTRACCION VE-30	10.00	10.00	1.00	0.12				10	10	0.12	24	0.12				0.57					0.57
EXTRACCION VE-30	12.00	8.00	1.00	0.45				12	8	0.45	24	0.46				2.14					2.14
EXTRACCION VE-30	12.00	8.00	1.00	0.38				12	8	0.38	24	0.39				1.81					1.81
EXTRACCION VE-30	12.00	8.00	1.00	0.19				12	8	0.19	24	0.19				0.91					0.91
EXTRACCION VE-30	8.00	12.00	1.00	0.59				8	12	0.59	24	0.60				2.81					2.81
EXTRACCION VE-31	28.00	16.00	1.00	1.91				28	16	1.91	24	4.27				20.02					20.02
EXTRACCION VE-31	10.00	4.00	1.00	1.11				10	4	1.11	24	0.79				3.70					3.70
EXTRACCION VE-31	10.00	4.00	1.00	0.78				10	4	0.78	24	0.55				2.60					2.60
EXTRACCION VE-31	20.00	10.00	1.00	3.31				20	10	3.31	24	5.04				23.66					23.66
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	4.00	1.00	1.11				10	4	1.11	24	0.79				3.70					3.70
EXTRACCION VE-31	10.00	4.00	1.00	1.11				10	4	1.11	24	0.79				3.70					3.70
EXTRACCION VE-31	10.00	4.00	1.00	1.11				10	4	1.11	24	0.79				3.70					3.70
EXTRACCION VE-31	10.00	4.00	1.00	1.11				10	4	1.11	24	0.79				3.70					3.70
EXTRACCION VE-31	10.00	4.00	1.00	1.11				10	4	1.11	24	0.79				3.70					3.70
EXTRACCION VE-31	10.00	4.00	1.00	1.11				10	4	1.11	24	0.79				3.70					3.70
EXTRACCION VE-31	10.00	4.00	1.00	1.11				10	4	1.11	24	0.79				3.70					3.70
EXTRACCION VE-31	10.00	4.00	1.00	1.11				10	4	1.11	24	0.79				3.70					3.70
EXTRACCION VE-31	10.00	4.00	1.00	1.06				10	4	1.06	24	0.75				3.54					3.54
EXTRACCION VE-31	10.00	4.00	1.00	1.06				10	4	1.06	24	0.75				3.54					3.54
EXTRACCION VE-31	10.00	4.00	1.00	1.06				10	4	1.06	24	0.75				3.54					3.54
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	24.00	12.00	1.00	2.60				24	12	2.60	24	4.75				22.30					22.30
EXTRACCION VE-31	16.00	10.00	1.00	6.12				16	10	6.12	24	8.08				37.91					37.91
EXTRACCION VE-31	10.00	4.00	1.00	1.91				10	4	1.91	24	1.36				6.37					6.37
EXTRACCION VE-31	10.00	4.00	1.00	4.47				10	4	4.47	24	3.18				14.91					14.91
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	4.00	1.00	2.90				10	4	2.90	24	2.06				9.67					9.67

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-31	10.00	4.00	1.00	2.60				10	4	2.60	24	1.85				8.67					8.67
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	4.00	1.00	0.87				10	4	0.87	24	0.62				2.90					2.90
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	4.00	1.00	0.87				10	4	0.87	24	0.62				2.90					2.90
EXTRACCION VE-31	10.00	4.00	1.00	0.87				10	4	0.87	24	0.62				2.90					2.90
EXTRACCION VE-31	10.00	4.00	1.00	0.87				10	4	0.87	24	0.62				2.90					2.90
EXTRACCION VE-31	10.00	4.00	1.00	0.84				10	4	0.84	24	0.60				2.80					2.80
EXTRACCION VE-31	10.00	4.00	1.00	0.84				10	4	0.84	24	0.60				2.80					2.80
EXTRACCION VE-31	10.00	4.00	1.00	0.82				10	4	0.82	24	0.58				2.74					2.74
EXTRACCION VE-31	10.00	4.00	1.00	0.82				10	4	0.82	24	0.58				2.74					2.74
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	4.00	1.00	1.78				10	4	1.78	24	1.27				5.94					5.94
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	4.00	1.00	2.78				10	4	2.78	24	1.98				9.27					9.27
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	4.00	1.00	0.48				10	4	0.48	24	0.34				1.60					1.60
EXTRACCION VE-31	10.00	4.00	1.00	7.59				10	4	7.59	24	5.40				25.32					25.32
EXTRACCION VE-31	10.00	4.00	1.00	0.75				10	4	0.75	24	0.53				2.50					2.50
EXTRACCION VE-31	10.00	4.00	1.00	1.25				10	4	1.25	24	0.89				4.17					4.17
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	4.00	1.00	1.11				10	4	1.11	24	0.79				3.70					3.70
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	4.00	1.00	4.06				10	4	4.06	24	2.89				13.54					13.54
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	4.00	1.00	2.36				10	4	2.36	24	1.68				7.87					7.87
EXTRACCION VE-31	10.00	4.00	1.00	2.19				10	4	2.19	24	1.56				7.30					7.30
EXTRACCION VE-31	8.00	8.00	1.00	0.25				8	8	0.25	24	0.20				0.95					0.95
EXTRACCION VE-31	8.00	8.00	1.00	0.25				8	8	0.25	24	0.20				0.95					0.95
EXTRACCION VE-31	10.00	4.00	1.00	1.27				10	4	1.27	24	0.90				4.24					4.24
EXTRACCION VE-31	10.00	4.00	1.00	0.70				10	4	0.70	24	0.50				2.33					2.33
EXTRACCION VE-31	22.00	10.00	1.00	3.26				22	10	3.26	24	5.30				24.85					24.85
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	4.00	1.00	1.18				10	4	1.18	24	0.84				3.94					3.94
EXTRACCION VE-31	10.00	4.00	1.00	1.18				10	4	1.18	24	0.84				3.94					3.94
EXTRACCION VE-31	10.00	4.00	1.00	1.16				10	4	1.16	24	0.82				3.87					3.87
EXTRACCION VE-31	10.00	4.00	1.00	1.16				10	4	1.16	24	0.82				3.87					3.87
EXTRACCION VE-31	10.00	4.00	1.00	1.13				10	4	1.13	24	0.80				3.77					3.77
EXTRACCION VE-31	10.00	4.00	1.00	1.09				10	4	1.09	24	0.78				3.64					3.64
EXTRACCION VE-31	10.00	4.00	1.00	1.09				10	4	1.09	24	0.78				3.64					3.64
EXTRACCION VE-31	10.00	4.00	1.00	1.03				10	4	1.03	24	0.73				3.44					3.44
EXTRACCION VE-31	10.00	4.00	1.00	1.03				10	4	1.03	24	0.73				3.44					3.44
EXTRACCION VE-31	10.00	4.00	1.00	1.03				10	4	1.03	24	0.73				3.44					3.44
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	20.00	12.00	1.00	3.30				20	12	3.30	24	5.36				25.16					25.16
EXTRACCION VE-31	10.00	4.00	1.00	2.03				10	4	2.03	24	1.44				6.77					6.77
EXTRACCION VE-31	10.00	4.00	1.00	4.47				10	4	4.47	24	3.18				14.91					14.91
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	4.00	1.00	1.72				10	4	1.72	24	1.22				5.74					5.74
EXTRACCION VE-31	10.00	6.00	1.00	2.54				10	6	2.54	24	2.06				9.68					9.68
EXTRACCION VE-31	10.00	4.00	1.00	3.81				10	4	3.81	24	2.71				12.71					12.71
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	4.00	1.00	2.77				10	4	2.77	24	1.97				9.24					9.24
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	4.00	1.00	2.93				10	4	2.93	24	2.08				9.77					9.77
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	4.00	1.00	0.69				10	4	0.69	24	0.49				2.30					2.30
EXTRACCION VE-31	10.00	4.00	1.00	0.52				10	4	0.52	24	0.37				1.73					1.73
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	4.00	1.00	1.13				10	4	1.13	24	0.80				3.77					3.77
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	6.00	1.00	2.32				10	6	2.32	24	1.89				8.84					8.84
EXTRACCION VE-31	10.00	6.00	1.00	10.89				10	6	10.89	24	8.85				41.51					41.51
EXTRACCION VE-31	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-31	10.00	4.00	1.00	1.28				10	4	1.28	24	0.91				4.27					4.27
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-31	10.00	4.00	1.00	3.58				10	4	3.58	24	2.55				11.94					11.94
EXTRACCION VE-31	10.00	4.00	1.00	8.25				10	4	8.25	24	5.87				27.52					27.52
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	24.00	12.00	1.00	3.37				24	12	3.37	24	6.16				28.90					28.90
EXTRACCION VE-31	10.00	4.00	1.00	1.18				10	4	1.18	24	0.84				3.94					3.94
EXTRACCION VE-31	10.00	4.00	1.00	1.40				10	4	1.40	24	1.00				4.67					4.67
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	6.00	1.00	3.28				10	6	3.28	24	2.67				12.50					12.50
EXTRACCION VE-31	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-31	10.00	8.00	1.00	3.71				10	8	3.71	24	3.39				15.91					15.91
EXTRACCION VE-31	12.00	8.00	1.00	6.38				12	8	6.38	24	6.48				30.40					30.40
EXTRACCION VE-31	14.00	10.00	1.00	6.76				14	10	6.76	24	8.24				38.65					38.65
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	10.00	4.00	1.00	5.27				10	4	5.27	24	3.75				17.58					17.58
EXTRACCION VE-31	16.00	10.00	1.00	6.54				16	10	6.54	24	8.64				40.51					40.51
EXTRACCION VE-31	18.00	10.00	1.00	5.12				18	10	5.12	24	7.28				34.16					34.16
EXTRACCION VE-31	20.00	10.00	1.00	1.80				20	10	1.80	24	2.74				12.87					12.87
EXTRACCION VE-31	22.00	10.00	1.00	8.24				22	10	8.24	24	13.39				62.82					62.82
EXTRACCION VE-31	10.00	4.00	1.00	3.71				10	4	3.71	24	2.64				12.37					12.37
EXTRACCION VE-31	10.00	4.00	1.00	1.20				10	4	1.20	24	0.85				4.00					4.00
EXTRACCION VE-31	10.00	4.00	1.00	1.42				10	4	1.42	24	1.01				4.74					4.74
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-31	10.00	6.00	1.00	3.19				10	6	3.19	24	2.59				12.16					12.16
EXTRACCION VE-31	16.00	6.00	1.00	6.83				16	6	6.83	24	7.63				35.80					35.80
EXTRACCION VE-31	16.00	8.00	1.00	10.26				16	8	10.26	24	12.51				58.67					58.67
EXTRACCION VE-31	16.00	10.00	1.00	14.62				16	10	14.62	24	19.31				90.56					90.56
EXTRACCION VE-31	20.00	10.00	1.00	8.46				20	10	8.46	24	12.89				60.47					60.47
EXTRACCION VE-31	14.00	8.00	1.00	6.80				14	8	6.80	24	7.60				35.64					35.64
EXTRACCION VE-31	12.00	6.00	1.00	13.81				12	6	13.81	24	12.63				59.22					59.22
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-31	16.00	8.00	1.00	8.98				16	8	8.98	24	10.95				51.35					51.35
EXTRACCION VE-31	10.00	4.00	1.00	0.82				10	4	0.82	24	0.58				2.74					2.74
EXTRACCION VE-31	10.00	4.00	1.00	0.74				10	4	0.74	24	0.53				2.47					2.47
EXTRACCION VE-31	10.00	4.00	1.00	0.27				10	4	0.27	24	0.19				0.90					0.90
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-31	28.00	16.00	1.00	2.58				28	16	2.58	24	5.77				27.05					27.05
EXTRACCION VE-31	28.00	16.00	1.00	3.59				28	16	3.59	24	8.02				37.63					37.63
EXTRACCION VE-31	28.00	16.00	1.00	0.30				28	16	0.30	24	0.67				3.14					3.14
EXTRACCION VE-31	10.00	4.00	1.00	0.83				10	4	0.83	24	0.59				2.77					2.77
EXTRACCION VE-31	10.00	4.00	1.00	0.10				10	4	0.10	24	0.07				0.33					0.33
EXTRACCION VE-32	12.00	4.00	1.00	2.64				12	4	2.64	24	2.15				10.06					10.06
EXTRACCION VE-32	10.00	4.00	1.00	1.68				10	4	1.68	24	1.19				5.60					5.60
EXTRACCION VE-32	12.00	8.00	1.00	2.39				12	8	2.39	24	2.43				11.39					11.39
EXTRACCION VE-32	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-32	10.00	4.00	1.00	0.67				10	4	0.67	24	0.48				2.23					2.23
EXTRACCION VE-32	12.00	8.00	1.00	6.15				12	8	6.15	24	6.25				29.30					29.30
EXTRACCION VE-32	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-32	10.00	10.00	1.00	0.12				10	10	0.12	24	0.12				0.57					0.57
EXTRACCION VE-32	12.00	8.00	1.00	0.44				12	8	0.44	24	0.45				2.10					2.10
EXTRACCION VE-32	12.00	8.00	1.00	0.80				12	8	0.80	24	0.81				3.81					3.81
EXTRACCION VE-32	12.00	8.00	1.00	1.14				12	8	1.14	24	1.16				5.43					5.43
EXTRACCION VE-32	12.00	8.00	1.00	0.44				12	8	0.44	24	0.45				2.10					2.10
EXTRACCION VE-32	10.00	4.00	1.00	0.42				10	4	0.42	24	0.30				1.40					1.40
EXTRACCION VE-32	10.00	4.00	1.00	0.08				10	4	0.08	24	0.06				0.27					0.27
EXTRACCION VE-33	12.00	6.00	1.00	1.91				12	6	1.91	24	1.75				8.19					8.19
EXTRACCION VE-33	10.00	4.00	1.00	3.17				10	4	3.17	24	2.25				10.57					10.57
EXTRACCION VE-33	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-33	12.00	4.00	1.00	3.18				12	4	3.18	24	2.58				12.12					12.12
EXTRACCION VE-33	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-33	12.00	8.00	1.00	4.07				12	8	4.07	24	4.14				19.39					19.39
EXTRACCION VE-33	12.00	8.00	1.00	1.82				12	8	1.82	24	1.85				8.67					8.67
EXTRACCION VE-33	12.00	8.00	1.00	1.09				12	8	1.09	24	1.11				5.19					5.19
EXTRACCION VE-33	12.00	8.00	1.00	6.00				12	8	6.00	24	6.10				28.59					28.59
EXTRACCION VE-33	12.00	6.00	1.00	1.92				12	6	1.92	24	1.76				8.23					8.23
EXTRACCION VE-33	10.00	10.00	1.00	0.12				10	10	0.12	24	0.12				0.57					0.57
EXTRACCION VE-33	12.00	8.00	1.00	2.58				12	8	2.58	24	2.62				12.29					12.29
EXTRACCION VE-33	12.00	8.00	1.00	0.59				12	8	0.59	24	0.60				2.81					2.81
EXTRACCION VE-34	12.00	8.00	1.00	3.61				12	8	3.61	24	3.67				17.20					17.20
EXTRACCION VE-34	10.00	4.00	1.00	2.67				10	4	2.67	24	1.90				8.91					8.91
EXTRACCION VE-34	12.00	4.00	1.00	1.83				12	4	1.83	24	1.49				6.98					6.98
EXTRACCION VE-34	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-34	8.00	8.00	1.00	0.05				8	8	0.05	24	0.04				0.19					0.19
EXTRACCION VE-34	12.00	8.00	1.00	7.66				12	8	7.66	24	7.78				36.50					36.50
EXTRACCION VE-34	12.00	8.00	1.00	1.82				12	8	1.82	24	1.85				8.67					8.67
EXTRACCION VE-34	12.00	8.00	1.00	0.46				12	8	0.46	24	0.47				2.19					2.19
EXTRACCION VE-34	12.00	8.00	1.00	6.00				12	8	6.00	24	6.10				28.59					28.59
EXTRACCION VE-34	10.00	10.00	1.00	0.12				10	10	0.12	24	0.12				0.57					0.57
EXTRACCION VE-34	12.00	8.00	1.00	0.63				12	8	0.63	24	0.64				3.00					3.00
EXTRACCION VE-34	12.00	8.00	1.00	1.19				12	8	1.19	24	1.21				5.67					5.67
EXTRACCION VE-34	8.00	12.00	1.00	0.59				8	12	0.59	24	0.60				2.81					2.81
EXTRACCION VE-35	10.00	4.00	1.00	1.41				10	4	1.41	24	1.00				4.70					4.70
EXTRACCION VE-35	10.00	4.00	1.00	0.55				10	4	0.55	24	0.39				1.83					1.83
EXTRACCION VE-35	10.00	6.00	1.00	4.11				10	6	4.11	24	3.34				15.67					15.67
EXTRACCION VE-35	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-35	8.00	8.00	1.00	0.12				8	8	0.12	24	0.10				0.46					0.46
EXTRACCION VE-35	8.00	8.00	1.00	0.10				8	8	0.10	24	0.08				0.38					0.38
EXTRACCION VE-35	10.00	4.00	1.00	0.42				10	4	0.42	24	0.30				1.40					1.40
EXTRACCION VE-35	10.00	6.00	1.00	21.38				10	6	21.38	24	17.38				81.50					81.50

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-35	10.00	6.00	1.00	11.27				10	6	11.27	24	9.16				42.96					42.96
EXTRACCION VE-35	10.00	6.00	1.00	1.29				10	6	1.29	24	1.05				4.92					4.92
EXTRACCION VE-35	10.00	6.00	1.00	2.10				10	6	2.10	24	1.71				8.01					8.01
EXTRACCION VE-35	10.00	6.00	1.00	14.89				10	6	14.89	24	12.10				56.76					56.76
EXTRACCION VE-35	10.00	6.00	1.00	6.74				10	6	6.74	24	5.48				25.69					25.69
EXTRACCION VE-35	10.00	6.00	1.00	0.14				10	6	0.14	24	0.11				0.53					0.53
EXTRACCION VE-35	10.00	6.00	1.00	0.05				10	6	0.05	24	0.04				0.19					0.19
EXTRACCION VE-35	10.00	6.00	1.00	0.05				10	6	0.05	24	0.04				0.19					0.19
EXTRACCION VE-35	10.00	6.00	1.00	0.91				10	6	0.91	24	0.74				3.47					3.47
EXTRACCION VE-35	6.00	10.00	1.00	0.64				6	10	0.64	24	0.52				2.44					2.44
RETORNO UFCO-01	43.00	11.00	1.00	0.46	E			43	11	0.46	22	1.26	1.36		1.36	7.09				7.09	
RETORNO UFCO-01	14.00	6.00	1.00	0.55	E			14	6	0.55	24	0.56	0.67		0.67	2.62					2.62
RETORNO UFCO-01	14.00	6.00	1.00	0.63	E			14	6	0.63	24	0.64	0.77		0.77	3.00					3.00
RETORNO UFCO-01	14.00	6.00	1.00	0.11	E			14	6	0.11	24	0.11	0.13		0.13	0.52					0.52
RETORNO UFCO-01	12.00	12.00	1.00	0.40	E			12	12	0.40	24	0.49	0.57		0.57	2.29					2.29
RETORNO UFCO-02	43.00	11.00	1.00	0.36	E			43	11	0.36	22	0.99	1.06		1.06	5.55				5.55	
RETORNO UFCO-02	10.00	4.00	1.00	1.19	E			10	4	1.19	24	0.85	1.09		1.09	3.97					3.97
RETORNO UFCO-02	8.00	8.00	1.00	0.45	E			8	8	0.45	24	0.37	0.46		0.46	1.72					1.72
RETORNO UFCO-02	10.00	4.00	1.00	0.69	E			10	4	0.69	24	0.49	0.63		0.63	2.30					2.30
RETORNO UFCO-03	43.00	11.00	1.00	0.36	E			43	11	0.36	22	0.99	1.06		1.06	5.55				5.55	
RETORNO UFCO-03	10.00	4.00	1.00	1.19	E			10	4	1.19	24	0.85	1.09		1.09	3.97					3.97
RETORNO UFCO-03	10.00	4.00	1.00	0.60	E			10	4	0.60	24	0.43	0.55		0.55	2.00					2.00
RETORNO UFCO-03	8.00	8.00	1.00	0.45	E			8	8	0.45	24	0.37	0.46		0.46	1.72					1.72
RETORNO UFCO-04	43.00	11.00	1.00	0.36	E			43	11	0.36	22	0.99	1.06		1.06	5.55				5.55	
RETORNO UFCO-04	10.00	4.00	1.00	1.21	E			10	4	1.21	24	0.86	1.11		1.11	4.04					4.04
RETORNO UFCO-04	10.00	4.00	1.00	0.80	E			10	4	0.80	24	0.57	0.73		0.73	2.67					2.67
RETORNO UFCO-04	8.00	8.00	1.00	0.45	E			8	8	0.45	24	0.37	0.46		0.46	1.72					1.72
RETORNO UFCO-05	10.00	4.00	1.00	1.21	E			10	4	1.21	24	0.86	1.11		1.11	4.04					4.04
RETORNO UFCO-05	10.00	4.00	1.00	1.54	E			10	4	1.54	24	1.10	1.41		1.41	5.14					5.14
RETORNO UFCO-05	43.00	11.00	1.00	0.36	E			43	11	0.36	22	0.99	1.06		1.06	5.55				5.55	
RETORNO UFCO-05	8.00	8.00	1.00	0.45	E			8	8	0.45	24	0.37	0.46		0.46	1.72					1.72
RETORNO UFCO-10	43.00	11.00	1.00	0.44	E			43	11	0.44	22	1.21	1.30		1.30	6.78				6.78	
RETORNO UFCO-10	10.00	4.00	1.00	1.05	E			10	4	1.05	24	0.75	0.96		0.96	3.50					3.50
RETORNO UFCO-10	10.00	4.00	1.00	6.08	E			10	4	6.08	24	4.32	5.56		5.56	20.28					20.28
RETORNO UFCO-10	8.00	8.00	1.00	0.47	E			8	8	0.47	24	0.38	0.48		0.48	1.79					1.79
RETORNO UFCO-10	10.00	4.00	1.00	0.55	E			10	4	0.55	24	0.39	0.50		0.50	1.83					1.83
RETORNO UFCO-11	43.00	11.00	1.00	0.44	E			43	11	0.44	22	1.21	1.30		1.30	6.78				6.78	
RETORNO UFCO-11	10.00	4.00	1.00	3.11	E			10	4	3.11	24	2.21	2.84		2.84	10.37					10.37
RETORNO UFCO-11	10.00	4.00	1.00	0.05	E			10	4	0.05	24	0.04	0.05		0.05	0.17					0.17
RETORNO UFCO-11	8.00	8.00	1.00	0.47	E			8	8	0.47	24	0.38	0.48		0.48	1.79					1.79
RETORNO UFCO-14	43.00	11.00	1.00	0.36	E			43	11	0.36	22	0.99	1.06		1.06	5.55				5.55	
RETORNO UFCO-14	10.00	4.00	1.00	1.73	E			10	4	1.73	24	1.23	1.58		1.58	5.77					5.77
RETORNO UFCO-14	10.00	4.00	1.00	0.49	E			10	4	0.49	24	0.35	0.45		0.45	1.63					1.63
RETORNO UFCO-14	8.00	8.00	1.00	0.44	E			8	8	0.44	24	0.36	0.45		0.45	1.68					1.68
RETORNO UFCO-15	43.00	11.00	1.00	0.50	E			43	11	0.50	22	1.37	1.47		1.47	7.71				7.71	
RETORNO UFCO-15	16.00	8.00	1.00	0.69	E			16	8	0.69	24	0.84	0.98		0.98	3.95					3.95
RETORNO UFCO-15	16.00	8.00	1.00	3.91	E			16	8	3.91	24	4.77	5.56		5.56	22.36					22.36
RETORNO UFCO-15	16.00	8.00	1.00	0.80	E			16	8	0.80	24	0.98	1.14		1.14	4.57					4.57
RETORNO UFCO-15	14.00	14.00	1.00	0.37	E			14	14	0.37	24	0.53	0.60		0.60	2.47					2.47
RETORNO UFCO-17	43.00	11.00	1.00	0.38	E			43	11	0.38	22	1.04	1.12		1.12	5.86				5.86	
RETORNO UFCO-17	10.00	4.00	1.00	1.32	E			10	4	1.32	24	0.94	1.21		1.21	4.40					4.40
RETORNO UFCO-17	10.00	4.00	1.00	0.05	E			10	4	0.05	24	0.04	0.05		0.05	0.17					0.17
RETORNO UFCO-17	8.00	8.00	1.00	0.05	E			8	8	0.05	24	0.04	0.05		0.05	0.19					0.19
RETORNO UFCO-19	43.00	11.00	1.00	0.58	E			43	11	0.58	22	1.59	1.71		1.71	8.94				8.94	
RETORNO UFCO-19	20.00	8.00	1.00	1.25	E			20	8	1.25	24	1.78	2.03		2.03	8.34					8.34
RETORNO UFCO-19	20.00	8.00	1.00	0.11	E			20	8	0.11	24	0.16	0.18		0.18	0.73					0.73
RETORNO UFCO-19	16.00	16.00	1.00	0.45	E			16	16	0.45	24	0.73	0.82		0.82	3.43					3.43
RETORNO UFCO-21	43.00	11.00	1.00	0.58	E			43	11	0.58	22	1.59	1.71		1.71	8.94				8.94	
RETORNO UFCO-21	20.00	8.00	1.00	1.25	E			20	8	1.25	24	1.78	2.03		2.03	8.34					8.34

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
RETORNO UFCO-21	20.00	8.00	1.00	0.11		E		20	8	0.11	24	0.16	0.18		0.18	0.73					0.73
RETORNO UFCO-21	16.00	16.00	1.00	0.45		E		16	16	0.45	24	0.73	0.82		0.82	3.43					3.43
RETORNO UFCO-23	43.00	11.00	1.00	0.32		E		43	11	0.32	22	0.88	0.94		0.94	4.93				4.93	
RETORNO UFCO-23	10.00	4.00	1.00	1.80		E		10	4	1.80	24	1.28	1.65		1.65	6.00					6.00
RETORNO UFCO-23	10.00	4.00	1.00	8.64		E		10	4	8.64	24	6.14	7.90		7.90	28.82					28.82
RETORNO UFCO-23	8.00	8.00	1.00	0.47		E		8	8	0.47	24	0.38	0.48		0.48	1.79					1.79
RETORNO UFCO-23	10.00	4.00	1.00	0.02		E		10	4	0.02	24	0.01	0.02		0.02	0.07					0.07
RETORNO UFCO-24	43.00	11.00	1.00	0.32		E		43	11	0.32	22	0.88	0.94		0.94	4.93				4.93	
RETORNO UFCO-24	10.00	4.00	1.00	1.80		E		10	4	1.80	24	1.28	1.65		1.65	6.00					6.00
RETORNO UFCO-24	10.00	4.00	1.00	8.64		E		10	4	8.64	24	6.14	7.90		7.90	28.82					28.82
RETORNO UFCO-24	8.00	8.00	1.00	0.47		E		8	8	0.47	24	0.38	0.48		0.48	1.79					1.79
RETORNO UFCO-24	10.00	4.00	1.00	0.04		E		10	4	0.04	24	0.03	0.04		0.04	0.13					0.13
RETORNO UFCO-25	43.00	11.00	1.00	0.32		E		43	11	0.32	22	0.88	0.94		0.94	4.93				4.93	
RETORNO UFCO-25	10.00	4.00	1.00	2.16		E		10	4	2.16	24	1.54	1.98		1.98	7.20					7.20
RETORNO UFCO-25	10.00	4.00	1.00	8.22		E		10	4	8.22	24	5.85	7.52		7.52	27.42					27.42
RETORNO UFCO-25	8.00	8.00	1.00	0.47		E		8	8	0.47	24	0.38	0.48		0.48	1.79					1.79
RETORNO UFCO-25	10.00	4.00	1.00	0.14		E		10	4	0.14	24	0.10	0.13		0.13	0.47					0.47
RETORNO UFCO-26	43.00	11.00	1.00	0.32		E		43	11	0.32	22	0.88	0.94		0.94	4.93				4.93	
RETORNO UFCO-26	10.00	4.00	1.00	1.80		E		10	4	1.80	24	1.28	1.65		1.65	6.00					6.00
RETORNO UFCO-26	10.00	4.00	1.00	8.64		E		10	4	8.64	24	6.14	7.90		7.90	28.82					28.82
RETORNO UFCO-26	8.00	8.00	1.00	0.47		E		8	8	0.47	24	0.38	0.48		0.48	1.79					1.79
RETORNO UFCO-26	10.00	4.00	1.00			E		10	4		24										
RETORNO UMA-02	16.00	8.00	1.00	1.37		E		16	8	1.37	24	1.67	1.95		1.95	7.83					7.83
RETORNO UMA-02	16.00	8.00	1.00	0.29		E		16	8	0.29	24	0.35	0.41		0.41	1.66					1.66
RETORNO UMA-02	14.00	14.00	1.00	0.17		E		14	14	0.17	24	0.24	0.28		0.28	1.13					1.13
RETORNO UMA-02	14.00	14.00	1.00	0.17		E		14	14	0.17	24	0.24	0.28		0.28	1.13					1.13
RETORNO UMAE-01	18.00	10.00	1.00	1.45		E		18	10	1.45	24	2.06	2.36		2.36	9.67					9.67
RETORNO UMAE-01	20.00	10.00	1.00	0.73		E		20	10	0.73	24	1.11	1.26		1.26	5.22					5.22
RETORNO UMAE-01	18.00	10.00	1.00	2.52		E		18	10	2.52	24	3.58	4.10		4.10	16.81					16.81
RETORNO UMAE-01	22.00	14.00	1.00	4.67		E		22	14	4.67	24	8.54	9.49		9.49	40.05					40.05
RETORNO UMAE-01	10.00	4.00	1.00	2.96		E		10	4	2.96	24	2.11	2.71		2.71	9.87					9.87
RETORNO UMAE-01	8.00	8.00	1.00	0.10		E		8	8	0.10	24	0.08	0.10		0.10	0.38					0.38
RETORNO UMAE-01	14.00	6.00	1.00	2.16		E		14	6	2.16	24	2.19	2.63		2.63	10.29					10.29
RETORNO UMAE-01	20.00	10.00	1.00	0.77		E		20	10	0.77	24	1.17	1.33		1.33	5.50					5.50
RETORNO UMAE-01	20.00	10.00	1.00	0.31		E		20	10	0.31	24	0.47	0.54		0.54	2.22					2.22
RETORNO UMAE-01	10.00	4.00	1.00	3.93		E		10	4	3.93	24	2.80	3.59		3.59	13.11					13.11
RETORNO UMAE-01	10.00	4.00	1.00	0.28		E		10	4	0.28	24	0.20	0.26		0.26	0.93					0.93
RETORNO UMAE-01	10.00	4.00	1.00	0.75		E		10	4	0.75	24	0.53	0.69		0.69	2.50					2.50
RETORNO UMAE-01	10.00	4.00	1.00			E		10	4		24										
RETORNO UMAE-01	10.00	4.00	1.00	1.85		E		10	4	1.85	24	1.32	1.69		1.69	6.17					6.17
RETORNO UMAE-01	8.00	8.00	1.00	0.12		E		8	8	0.12	24	0.10	0.12		0.12	0.46					0.46
RETORNO UMAE-01	10.00	4.00	1.00	5.41		E		10	4	5.41	24	3.85	4.95		4.95	18.05					18.05
RETORNO UMAE-01	10.00	4.00	1.00	0.08		E		10	4	0.08	24	0.06	0.07		0.07	0.27					0.27
RETORNO UMAE-01	10.00	4.00	1.00	0.17		E		10	4	0.17	24	0.12	0.16		0.16	0.57					0.57
RETORNO UMAE-01	22.00	12.00	1.00	7.59		E		22	12	7.59	24	13.11	14.65		14.65	61.48					61.48
RETORNO UMAE-01	14.00	14.00	1.00	0.12		E		14	14	0.12	24	0.17	0.20		0.20	0.80					0.80
RETORNO UMAE-01	14.00	14.00	1.00	0.12		E		14	14	0.12	24	0.17	0.20		0.20	0.80					0.80
RETORNO UMAE-01	14.00	14.00	1.00	0.34		E		14	14	0.34	24	0.48	0.55		0.55	2.27					2.27
RETORNO UMAE-01	10.00	4.00	1.00	0.54		E		10	4	0.54	24	0.38	0.49		0.49	1.80					1.80
RETORNO UMAE-01	8.00	8.00	1.00	0.12		E		8	8	0.12	24	0.10	0.12		0.12	0.46					0.46
RETORNO UMAE-01	10.00	4.00	1.00	0.48		E		10	4	0.48	24	0.34	0.44		0.44	1.60					1.60
RETORNO UMAE-01	8.00	8.00	1.00	0.12		E		8	8	0.12	24	0.10	0.12		0.12	0.46					0.46
RETORNO UMAE-01	8.00	8.00	1.00	0.15		E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-01	22.00	14.00	1.00	2.67		E		22	14	2.67	24	4.88	5.43		5.43	22.90					22.90
RETORNO UMAE-01	22.00	14.00	1.00	0.41		E		22	14	0.41	24	0.75	0.83		0.83	3.52					3.52
RETORNO UMAE-01	22.00	12.00	1.00	3.77		E		22	12	3.77	24	6.51	7.28		7.28	30.54					30.54
RETORNO UMAE-01	22.00	12.00	1.00	0.03		E		22	12	0.03	24	0.05	0.06		0.06	0.24					0.24
RETORNO UMAE-01	22.00	12.00	1.00	0.21		E		22	12	0.21	24	0.36	0.41		0.41	1.70					1.70
RETORNO UMAE-01	10.00	4.00	1.00	0.33		E		10	4	0.33	24	0.23	0.30		0.30	1.10					1.10

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
RETORNO UMAE-01	10.00	4.00	1.00	2.16		E		10	4	2.16	24	1.54	1.98		1.98	7.20					7.20
RETORNO UMAE-01	22.00	14.00	1.00	0.79		E		22	14	0.79	24	1.44	1.61		1.61	6.78					6.78
RETORNO UMAE-01	22.00	14.00	1.00	1.24		E		22	14	1.24	24	2.27	2.52		2.52	10.64					10.64
RETORNO UMAE-01	22.00	14.00	1.00	1.68		E		22	14	1.68	24	3.07	3.41		3.41	14.41					14.41
RETORNO UMAE-02	16.00	10.00	1.00	6.19		E		16	10	6.19	24	8.18	9.43		9.43	38.34					38.34
RETORNO UMAE-02	16.00	10.00	1.00	0.71		E		16	10	0.71	24	0.94	1.08		1.08	4.40					4.40
RETORNO UMAE-02	16.00	10.00	1.00	4.82		E		16	10	4.82	24	6.37	7.35		7.35	29.86					29.86
RETORNO UMAE-02	12.00	12.00	1.00	0.39		E		12	12	0.39	24	0.48	0.55		0.55	2.23					2.23
RETORNO UMAE-02	14.00	14.00	1.00	0.39		E		14	14	0.39	24	0.55	0.63		0.63	2.60					2.60
RETORNO UMAE-02	14.00	14.00	1.00	0.39		E		14	14	0.39	24	0.55	0.63		0.63	2.60					2.60
RETORNO UMAE-02	16.00	10.00	1.00	1.99		E		16	10	1.99	24	2.63	3.03		3.03	12.33					12.33
RETORNO UMAE-03	14.00	14.00	1.00	0.49		E		14	14	0.49	24	0.70	0.80		0.80	3.27					3.27
RETORNO UMAE-03	16.00	6.00	1.00	1.99		E		16	6	1.99	24	2.22	2.63		2.63	10.43					10.43
RETORNO UMAE-03	16.00	6.00	1.00	0.62		E		16	6	0.62	24	0.69	0.82		0.82	3.25					3.25
RETORNO UMAE-03	16.00	6.00	1.00	0.73		E		16	6	0.73	24	0.82	0.96		0.96	3.83					3.83
RETORNO UMAE-03	16.00	6.00	1.00	1.27		E		16	6	1.27	24	1.42	1.68		1.68	6.66					6.66
RETORNO UMAE-03	16.00	6.00	1.00	4.19		E		16	6	4.19	24	4.68	5.53		5.53	21.96					21.96
RETORNO UMAE-03	16.00	6.00	1.00	2.30		E		16	6	2.30	24	2.57	3.04		3.04	12.06					12.06
RETORNO UMAE-04	30.00	14.00	1.00	9.29		E		30	14	9.29	24	20.77	22.65		22.65	97.39					97.39
RETORNO UMAE-04	30.00	14.00	1.00	3.85		E		30	14	3.85	24	8.61	9.39		9.39	40.36					40.36
RETORNO UMAE-04	30.00	14.00	1.00	9.35		E		30	14	9.35	24	20.90	22.80		22.80	98.02					98.02
RETORNO UMAE-04	30.00	14.00	1.00	7.20		E		30	14	7.20	24	16.09	17.56		17.56	75.48					75.48
RETORNO UMAE-04	30.00	14.00	1.00	2.70		E		30	14	2.70	24	6.04	6.58		6.58	28.30					28.30
RETORNO UMAE-04	30.00	14.00	1.00	18.61		E		30	14	18.61	24	41.60	45.38		45.38	195.09					195.09
RETORNO UMAE-04	20.00	10.00	1.00	4.27		E		20	10	4.27	24	6.51	7.38		7.38	30.52					30.52
RETORNO UMAE-04	16.00	16.00	1.00	0.28		E		16	16	0.28	24	0.46	0.51		0.51	2.13					2.13
RETORNO UMAE-04	16.00	16.00	1.00	0.28		E		16	16	0.28	24	0.46	0.51		0.51	2.13					2.13
RETORNO UMAE-04	20.00	14.00	1.00	4.83		E		20	14	4.83	24	8.34	9.32		9.32	39.13					39.13
RETORNO UMAE-04	10.00	10.00	1.00	0.07		E		10	10	0.07	24	0.07	0.09		0.09	0.33					0.33
RETORNO UMAE-04	14.00	8.00	1.00	2.16		E		14	8	2.16	24	2.41	2.85		2.85	11.32					11.32
RETORNO UMAE-04	16.00	8.00	1.00	4.42		E		16	8	4.42	24	5.39	6.29		6.29	25.27					25.27
RETORNO UMAE-04	8.00	8.00	1.00	0.07		E		8	8	0.07	24	0.06	0.07		0.07	0.27					0.27
RETORNO UMAE-04	10.00	4.00	1.00	0.48		E		10	4	0.48	24	0.34	0.44		0.44	1.60					1.60
RETORNO UMAE-04	8.00	8.00	1.00	0.12		E		8	8	0.12	24	0.10	0.12		0.12	0.46					0.46
RETORNO UMAE-04	10.00	4.00	1.00	1.52		E		10	4	1.52	24	1.08	1.39		1.39	5.07					5.07
RETORNO UMAE-04	8.00	8.00	1.00	0.38		E		8	8	0.38	24	0.31	0.39		0.39	1.45					1.45
RETORNO UMAE-04	20.00	10.00	1.00	3.28		E		20	10	3.28	24	5.00	5.67		5.67	23.44					23.44
RETORNO UMAE-04	30.00	14.00	1.00	3.53		E		30	14	3.53	24	7.89	8.61		8.61	37.01					37.01
RETORNO UMAE-04	10.00	4.00	1.00	3.18		E		10	4	3.18	24	2.26	2.91		2.91	10.61					10.61
RETORNO UMAE-04	8.00	8.00	1.00	0.38		E		8	8	0.38	24	0.31	0.39		0.39	1.45					1.45
RETORNO UMAE-04	8.00	8.00	1.00	0.13		E		8	8	0.13	24	0.11	0.13		0.13	0.50					0.50
RETORNO UMAE-04	20.00	14.00	1.00	3.18		E		20	14	3.18	24	5.49	6.14		6.14	25.76					25.76
RETORNO UMAE-04	12.00	4.00	1.00	1.28		E		12	4	1.28	24	1.04	1.30		1.30	4.88					4.88
RETORNO UMAE-04	10.00	10.00	1.00	0.38		E		10	10	0.38	24	0.39	0.46		0.46	1.81					1.81
RETORNO UMAE-04	24.00	14.00	1.00	4.34		E		24	14	4.34	24	8.38	9.26		9.26	39.29					39.29
RETORNO UMAE-04	16.00	6.00	1.00	1.83		E		16	6	1.83	24	2.05	2.42		2.42	9.59					9.59
RETORNO UMAE-04	14.00	14.00	1.00	0.05		E		14	14	0.05	24	0.07	0.08		0.08	0.33					0.33
RETORNO UMAE-04	14.00	14.00	1.00	0.05		E		14	14	0.05	24	0.07	0.08		0.08	0.33					0.33
RETORNO UMAE-04	16.00	6.00	1.00	0.71		E		16	6	0.71	24	0.79	0.94		0.94	3.72					3.72
RETORNO UMAE-04	8.00	8.00	1.00	0.14		E		8	8	0.14	24	0.11	0.14		0.14	0.53					0.53
RETORNO UMAE-04	20.00	8.00	1.00	3.67		E		20	8	3.67	24	5.22	5.97		5.97	24.48					24.48
RETORNO UMAE-04	8.00	8.00	1.00	0.38		E		8	8	0.38	24	0.31	0.39		0.39	1.45					1.45
RETORNO UMAE-04	8.00	8.00	1.00	0.07		E		8	8	0.07	24	0.06	0.07		0.07	0.27					0.27
RETORNO UMAE-04	20.00	8.00	1.00	0.57		E		20	8	0.57	24	0.81	0.93		0.93	3.80					3.80
RETORNO UMAE-04	20.00	8.00	1.00	0.60		E		20	8	0.60	24	0.85	0.98		0.98	4.00					4.00
RETORNO UMAE-04	30.00	14.00	1.00	0.99		E		30	14	0.99	24	2.21	2.41		2.41	10.38					10.38
RETORNO UMAE-04	30.00	14.00	1.00	0.63		E		30	14	0.63	24	1.41	1.54		1.54	6.60					6.60
RETORNO UMAE-04	30.00	14.00	1.00	0.15		E		30	14	0.15	24	0.34	0.37		0.37	1.57					1.57
RETORNO UMAE-04	30.00	14.00	1.00	0.15		E		30	14	0.15	24	0.34	0.37		0.37	1.57					1.57

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
RETORNO UMAE-04	20.00	8.00	1.00	0.21	E			20	8	0.21	24	0.30	0.34		0.34	1.40					1.40
RETORNO UMAE-04	20.00	8.00	1.00	0.06	E			20	8	0.06	24	0.09	0.10		0.10	0.40					0.40
RETORNO UMAE-04	10.00	4.00	1.00	2.28	E			10	4	2.28	24	1.62	2.08		2.08	7.61					7.61
RETORNO UMAE-04	10.00	4.00	1.00	0.02	E			10	4	0.02	24	0.01	0.02		0.02	0.07					0.07
RETORNO UMAE-04	10.00	4.00	1.00	0.28	E			10	4	0.28	24	0.20	0.26		0.26	0.93					0.93
RETORNO UMAE-04	16.00	8.00	1.00	0.01	E			16	8	0.01	24	0.01	0.01		0.01	0.06					0.06
RETORNO UMAE-04	16.00	8.00	1.00	0.07	E			16	8	0.07	24	0.09	0.10		0.10	0.40					0.40
RETORNO UMAE-04	16.00	6.00	1.00	6.78	E			16	6	6.78	24	7.58	8.96		8.96	35.54					35.54
RETORNO UMAE-04	16.00	6.00	1.00	6.04	E			16	6	6.04	24	6.75	7.98		7.98	31.66					31.66
RETORNO UMAE-04	16.00	6.00	1.00	0.33	E			16	6	0.33	24	0.37	0.44		0.44	1.73					1.73
RETORNO UMAE-04	16.00	6.00	1.00	1.99	E			16	6	1.99	24	2.22	2.63		2.63	10.43					10.43
RETORNO UMAE-04	16.00	6.00	1.00	0.38	E			16	6	0.38	24	0.42	0.50		0.50	1.99					1.99
RETORNO UMAE-04	20.00	10.00	1.00	2.10	E			20	10	2.10	24	3.20	3.63		3.63	15.01					15.01
RETORNO UMAE-04	20.00	10.00	1.00	0.28	E			20	10	0.28	24	0.43	0.48		0.48	2.00					2.00
RETORNO UMAE-04	20.00	10.00	1.00	6.72	E			20	10	6.72	24	10.24	11.61		11.61	48.03					48.03
RETORNO UMAE-04	20.00	10.00	1.00	0.28	E			20	10	0.28	24	0.43	0.48		0.48	2.00					2.00
RETORNO UMAE-04	30.00	14.00	1.00	1.20	E			30	14	1.20	24	2.68	2.93		2.93	12.58					12.58
RETORNO UMAE-04	20.00	10.00	1.00	3.95	E			20	10	3.95	24	6.02	6.82		6.82	28.23					28.23
RETORNO UMAE-04	20.00	10.00	1.00	0.57	E			20	10	0.57	24	0.87	0.98		0.98	4.07					4.07
RETORNO UMAE-04	20.00	10.00	1.00	0.35	E			20	10	0.35	24	0.53	0.60		0.60	2.50					2.50
RETORNO UMAE-04	20.00	10.00	1.00	0.35	E			20	10	0.35	24	0.53	0.60		0.60	2.50					2.50
RETORNO UMAE-05	22.00	16.00	1.00	3.62	E			22	16	3.62	24	6.99	7.72		7.72	32.77					32.77
RETORNO UMAE-05	22.00	16.00	1.00	7.03	E			22	16	7.03	24	13.57	15.00		15.00	63.65					63.65
RETORNO UMAE-05	22.00	16.00	1.00	6.74	E			22	16	6.74	24	13.01	14.38		14.38	61.02					61.02
RETORNO UMAE-05	22.00	16.00	1.00	10.00	E			22	16	10.00	24	19.30	21.34		21.34	90.54					90.54
RETORNO UMAE-05	12.00	8.00	1.00	8.16	E			12	8	8.16	24	8.29	9.95		9.95	38.88					38.88
RETORNO UMAE-05	8.00	8.00	1.00	0.40	E			8	8	0.40	24	0.33	0.41		0.41	1.52					1.52
RETORNO UMAE-05	8.00	8.00	1.00	0.40	E			8	8	0.40	24	0.33	0.41		0.41	1.52					1.52
RETORNO UMAE-05	8.00	8.00	1.00	0.35	E			8	8	0.35	24	0.28	0.36		0.36	1.33					1.33
RETORNO UMAE-05	10.00	4.00	1.00	4.80	E			10	4	4.80	24	3.41	4.39		4.39	16.01					16.01
RETORNO UMAE-05	10.00	4.00	1.00	0.59	E			10	4	0.59	24	0.42	0.54		0.54	1.97					1.97
RETORNO UMAE-05	8.00	8.00	1.00	0.38	E			8	8	0.38	24	0.31	0.39		0.39	1.45					1.45
RETORNO UMAE-05	10.00	8.00	1.00	1.10	E			10	8	1.10	24	1.01	1.23		1.23	4.72					4.72
RETORNO UMAE-05	8.00	8.00	1.00	0.40	E			8	8	0.40	24	0.33	0.41		0.41	1.52					1.52
RETORNO UMAE-05	8.00	8.00	1.00	0.35	E			8	8	0.35	24	0.28	0.36		0.36	1.33					1.33
RETORNO UMAE-05	8.00	8.00	1.00	0.35	E			8	8	0.35	24	0.28	0.36		0.36	1.33					1.33
RETORNO UMAE-05	10.00	4.00	1.00	4.00	E			10	4	4.00	24	2.84	3.66		3.66	13.34					13.34
RETORNO UMAE-05	22.00	16.00	1.00	16.91	E			22	16	16.91	24	32.64	36.08		36.08	153.10					153.10
RETORNO UMAE-05	12.00	6.00	1.00	4.30	E			12	6	4.30	24	3.93	4.81		4.81	18.44					18.44
RETORNO UMAE-05	10.00	10.00	1.00	0.36	E			10	10	0.36	24	0.37	0.44		0.44	1.72					1.72
RETORNO UMAE-05	12.00	8.00	1.00	5.29	E			12	8	5.29	24	5.37	6.45		6.45	25.21					25.21
RETORNO UMAE-05	8.00	8.00	1.00	0.33	E			8	8	0.33	24	0.27	0.34		0.34	1.26					1.26
RETORNO UMAE-05	8.00	8.00	1.00	0.33	E			8	8	0.33	24	0.27	0.34		0.34	1.26					1.26
RETORNO UMAE-05	18.00	8.00	1.00	1.22	E			18	8	1.22	24	1.61	1.86		1.86	7.56					7.56
RETORNO UMAE-05	18.00	8.00	1.00	6.08	E			18	8	6.08	24	8.03	9.27		9.27	37.66					37.66
RETORNO UMAE-05	16.00	16.00	1.00	0.28	E			16	16	0.28	24	0.46	0.51		0.51	2.13					2.13
RETORNO UMAE-05	16.00	16.00	1.00	0.28	E			16	16	0.28	24	0.46	0.51		0.51	2.13					2.13
RETORNO UMAE-05	14.00	6.00	1.00	3.94	E			14	6	3.94	24	4.00	4.80		4.80	18.77					18.77
RETORNO UMAE-05	12.00	12.00	1.00	0.33	E			12	12	0.33	24	0.40	0.47		0.47	1.89					1.89
RETORNO UMAE-05	22.00	14.00	1.00	5.21	E			22	14	5.21	24	9.53	10.59		10.59	44.69					44.69
RETORNO UMAE-05	10.00	8.00	1.00	0.06	E			10	8	0.06	24	0.05	0.07		0.07	0.26					0.26
RETORNO UMAE-05	22.00	16.00	1.00	1.77	E			22	16	1.77	24	3.42	3.78		3.78	16.02					16.02
RETORNO UMAE-05	22.00	16.00	1.00	7.90	E			22	16	7.90	24	15.25	16.86		16.86	71.52					71.52
RETORNO UMAE-05	22.00	16.00	1.00	8.21	E			22	16	8.21	24	15.85	17.52		17.52	74.33					74.33
RETORNO UMAE-05	16.00	8.00	1.00	4.85	E			16	8	4.85	24	5.91	6.90		6.90	27.73					27.73
RETORNO UMAE-05	22.00	16.00	1.00	5.60	E			22	16	5.60	24	10.81	11.95		11.95	50.70					50.70
RETORNO UMAE-05	22.00	16.00	1.00	0.39	E			22	16	0.39	24	0.75	0.83		0.83	3.53					3.53
RETORNO UMAE-05	16.00	8.00	1.00	3.62	E			16	8	3.62	24	4.41	5.15		5.15	20.70					20.70
RETORNO UMAE-05	16.00	8.00	1.00	0.29	E			16	8	0.29	24	0.35	0.41		0.41	1.66					1.66

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
RETORNO UMAE-05	18.00	8.00	1.00	0.24	E			18	8	0.24	24	0.32	0.37		0.37	1.49					1.49
RETORNO UMAE-05	18.00	8.00	1.00	0.26	E			18	8	0.26	24	0.34	0.40		0.40	1.61					1.61
RETORNO UMAE-05	14.00	6.00	1.00	4.61	E			14	6	4.61	24	4.68	5.62		5.62	21.97					21.97
RETORNO UMAE-05	14.00	6.00	1.00	0.48	E			14	6	0.48	24	0.49	0.59		0.59	2.29					2.29
RETORNO UMAE-05	12.00	8.00	1.00	2.13	E			12	8	2.13	24	2.16	2.60		2.60	10.15					10.15
RETORNO UMAE-05	12.00	8.00	1.00	0.30	E			12	8	0.30	24	0.30	0.37		0.37	1.43					1.43
RETORNO UMAE-05	22.00	16.00	1.00	0.52	E			22	16	0.52	24	1.00	1.11		1.11	4.71					4.71
RETORNO UMAE-05	22.00	16.00	1.00	1.64	E			22	16	1.64	24	3.17	3.50		3.50	14.85					14.85
RETORNO UMAE-05	22.00	16.00	1.00	0.69	E			22	16	0.69	24	1.33	1.47		1.47	6.25					6.25
RETORNO UMAE-05	22.00	16.00	1.00	6.78	E			22	16	6.78	24	13.09	14.47		14.47	61.38					61.38
RETORNO UMAE-05	22.00	16.00	1.00	9.69	E			22	16	9.69	24	18.71	20.67		20.67	87.73					87.73
RETORNO UMAE-05	22.00	16.00	1.00	0.48	E			22	16	0.48	24	0.93	1.02		1.02	4.35					4.35
RETORNO UMAE-09	14.00	6.00	1.00	3.19	E			14	6	3.19	24	3.24	3.89		3.89	15.20					15.20
RETORNO UMAE-09	12.00	12.00	1.00	0.07	E			12	12	0.07	24	0.09	0.10		0.10	0.40					0.40
RETORNO UMAE-09	14.00	6.00	1.00	4.92	E			14	6	4.92	24	5.00	6.00		6.00	23.44					23.44
RETORNO UMAE-09	14.00	6.00	1.00	3.19	E			14	6	3.19	24	3.24	3.89		3.89	15.20					15.20
RETORNO UMAE-09	12.00	12.00	1.00	0.07	E			12	12	0.07	24	0.09	0.10		0.10	0.40					0.40
RETORNO UMAE-09	14.00	6.00	1.00	0.33	E			14	6	0.33	24	0.34	0.40		0.40	1.57					1.57
RETORNO UMAE-09	14.00	6.00	1.00	3.19	E			14	6	3.19	24	3.24	3.89		3.89	15.20					15.20
RETORNO UMAE-09	12.00	12.00	1.00	0.07	E			12	12	0.07	24	0.09	0.10		0.10	0.40					0.40
RETORNO UMAE-09	14.00	6.00	1.00	4.93	E			14	6	4.93	24	5.01	6.01		6.01	23.49					23.49
RETORNO UMAE-09	14.00	6.00	1.00	3.19	E			14	6	3.19	24	3.24	3.89		3.89	15.20					15.20
RETORNO UMAE-09	12.00	12.00	1.00	0.07	E			12	12	0.07	24	0.09	0.10		0.10	0.40					0.40
RETORNO UMAE-09	14.00	6.00	1.00	0.31	E			14	6	0.31	24	0.31	0.38		0.38	1.48					1.48
RETORNO UMAE-09	18.00	12.00	1.00	12.18	E			18	12	12.18	24	18.56	21.04		21.04	87.06					87.06
RETORNO UMAE-09	14.00	6.00	1.00	3.50	E			14	6	3.50	24	3.56	4.27		4.27	16.68					16.68
RETORNO UMAE-09	16.00	8.00	1.00	2.44	E			16	8	2.44	24	2.97	3.47		3.47	13.95					13.95
RETORNO UMAE-09	18.00	10.00	1.00	3.86	E			18	10	3.86	24	5.49	6.27		6.27	25.75					25.75
RETORNO UMAE-09	18.00	12.00	1.00	1.96	E			18	12	1.96	24	2.99	3.39		3.39	14.01					14.01
RETORNO UMAE-09	18.00	12.00	1.00	2.96	E			18	12	2.96	24	4.51	5.11		5.11	21.16					21.16
RETORNO UMAE-09	18.00	12.00	1.00	0.01	E			18	12	0.01	24	0.02	0.02		0.02	0.07					0.07
RETORNO UMAE-09	18.00	12.00	1.00	0.99	E			18	12	0.99	24	1.51	1.71		1.71	7.08					7.08
RETORNO UMAE-09	18.00	12.00	1.00	2.66	E			18	12	2.66	24	4.05	4.59		4.59	19.01					19.01
RETORNO UMAE-10	14.00	6.00	1.00	3.19	E			14	6	3.19	24	3.24	3.89		3.89	15.20					15.20
RETORNO UMAE-10	12.00	12.00	1.00	0.07	E			12	12	0.07	24	0.09	0.10		0.10	0.40					0.40
RETORNO UMAE-10	14.00	6.00	1.00	3.19	E			14	6	3.19	24	3.24	3.89		3.89	15.20					15.20
RETORNO UMAE-10	12.00	12.00	1.00	0.07	E			12	12	0.07	24	0.09	0.10		0.10	0.40					0.40
RETORNO UMAE-10	14.00	6.00	1.00	0.80	E			14	6	0.80	24	0.81	0.98		0.98	3.81					3.81
RETORNO UMAE-10	18.00	12.00	1.00	26.56	E			18	12	26.56	24	40.48	45.87		45.87	189.84					189.84
RETORNO UMAE-10	14.00	6.00	1.00	5.45	E			14	6	5.45	24	5.54	6.64		6.64	25.97					25.97
RETORNO UMAE-10	14.00	6.00	1.00	3.44	E			14	6	3.44	24	3.50	4.19		4.19	16.39					16.39
RETORNO UMAE-10	14.00	6.00	1.00	3.19	E			14	6	3.19	24	3.24	3.89		3.89	15.20					15.20
RETORNO UMAE-10	12.00	12.00	1.00	0.07	E			12	12	0.07	24	0.09	0.10		0.10	0.40					0.40
RETORNO UMAE-10	14.00	6.00	1.00	3.19	E			14	6	3.19	24	3.24	3.89		3.89	15.20					15.20
RETORNO UMAE-10	12.00	12.00	1.00	0.07	E			12	12	0.07	24	0.09	0.10		0.10	0.40					0.40
RETORNO UMAE-10	14.00	6.00	1.00	0.80	E			14	6	0.80	24	0.81	0.98		0.98	3.81					3.81
RETORNO UMAE-10	14.00	6.00	1.00	5.42	E			14	6	5.42	24	5.51	6.61		6.61	25.83					25.83
RETORNO UMAE-10	16.00	8.00	1.00	4.30	E			16	8	4.30	24	5.24	6.12		6.12	24.59					24.59
RETORNO UMAE-10	18.00	10.00	1.00	3.71	E			18	10	3.71	24	5.28	6.03		6.03	24.75					24.75
RETORNO UMAE-10	18.00	12.00	1.00	1.96	E			18	12	1.96	24	2.99	3.39		3.39	14.01					14.01
RETORNO UMAE-10	18.00	12.00	1.00	3.03	E			18	12	3.03	24	4.62	5.23		5.23	21.66					21.66
RETORNO UMAE-10	18.00	12.00	1.00	0.01	E			18	12	0.01	24	0.02	0.02		0.02	0.07					0.07
RETORNO UMAE-10	18.00	12.00	1.00	0.05	E			18	12	0.05	24	0.08	0.09		0.09	0.36					0.36
RETORNO UMAE-10	18.00	12.00	1.00	2.83	E			18	12	2.83	24	4.31	4.89		4.89	20.23					20.23
RETORNO UMAE-13	16.00	6.00	1.00	1.59	E			16	6	1.59	24	1.78	2.10		2.10	8.33					8.33
RETORNO UMAE-13	14.00	14.00	1.00	0.22	E			14	14	0.22	24	0.31	0.36		0.36	1.47					1.47
RETORNO UMAE-13	16.00	6.00	1.00	1.11	E			16	6	1.11	24	1.24	1.47		1.47	5.82					5.82
RETORNO UMAE-13	14.00	14.00	1.00	0.40	E			14	14	0.40	24	0.57	0.65		0.65	2.67					2.67
RETORNO UMAE-13	14.00	14.00	1.00	0.40	E			14	14	0.40	24	0.57	0.65		0.65	2.67					2.67

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
RETORNO UMAE-13	16.00	6.00	1.00	8.69		E		16	6	8.69	24	9.71	11.48		11.48	45.55					45.55
RETORNO UMAE-13	28.00	14.00	1.00	0.41		E		28	14	0.41	24	0.87	0.96		0.96	4.10					4.10
RETORNO UMAE-13	32.00	14.00	1.00	2.60		E		32	14	2.60	22	6.08	6.60		6.60	34.15				34.15	
RETORNO UMAE-13	16.00	16.00	1.00	0.22		E		16	16	0.22	24	0.36	0.40		0.40	1.68					1.68
RETORNO UMAE-13	10.00	4.00	1.00	2.61		E		10	4	2.61	24	1.86	2.39		2.39	8.71					8.71
RETORNO UMAE-13	8.00	8.00	1.00	0.45		E		8	8	0.45	24	0.37	0.46		0.46	1.72					1.72
RETORNO UMAE-13	40.00	16.00	1.00	6.69		E		40	16	6.69	22	19.03	20.39		20.39	106.96				106.96	
RETORNO UMAE-13	12.00	12.00	1.00	0.27		E		12	12	0.27	24	0.33	0.38		0.38	1.54					1.54
RETORNO UMAE-13	10.00	4.00	1.00	2.17		E		10	4	2.17	24	1.54	1.98		1.98	7.24					7.24
RETORNO UMAE-13	8.00	8.00	1.00	0.45		E		8	8	0.45	24	0.37	0.46		0.46	1.72					1.72
RETORNO UMAE-13	12.00	4.00	1.00	2.30		E		12	4	2.30	24	1.87	2.34		2.34	8.77					8.77
RETORNO UMAE-13	8.00	8.00	1.00	0.30		E		8	8	0.30	24	0.24	0.30		0.30	1.14					1.14
RETORNO UMAE-13	8.00	8.00	1.00	0.30		E		8	8	0.30	24	0.24	0.30		0.30	1.14					1.14
RETORNO UMAE-13	8.00	8.00	1.00	0.35		E		8	8	0.35	24	0.28	0.36		0.36	1.33					1.33
RETORNO UMAE-13	10.00	10.00	1.00	0.35		E		10	10	0.35	24	0.36	0.43		0.43	1.67					1.67
RETORNO UMAE-13	10.00	10.00	1.00	0.40		E		10	10	0.40	24	0.41	0.49		0.49	1.91					1.91
RETORNO UMAE-13	16.00	8.00	1.00	7.12		E		16	8	7.12	24	8.68	10.13		10.13	40.71					40.71
RETORNO UMAE-13	12.00	12.00	1.00	0.25		E		12	12	0.25	24	0.30	0.36		0.36	1.43					1.43
RETORNO UMAE-13	14.00	14.00	1.00	0.25		E		14	14	0.25	24	0.36	0.41		0.41	1.67					1.67
RETORNO UMAE-13	14.00	14.00	1.00	0.25		E		14	14	0.25	24	0.36	0.41		0.41	1.67					1.67
RETORNO UMAE-13	16.00	6.00	1.00	1.05		E		16	6	1.05	24	1.17	1.39		1.39	5.50					5.50
RETORNO UMAE-13	12.00	12.00	1.00	0.40		E		12	12	0.40	24	0.49	0.57		0.57	2.29					2.29
RETORNO UMAE-13	12.00	4.00	1.00	2.76		E		12	4	2.76	24	2.24	2.80		2.80	10.52					10.52
RETORNO UMAE-13	10.00	10.00	1.00	0.17		E		10	10	0.17	24	0.17	0.21		0.21	0.81					0.81
RETORNO UMAE-13	22.00	10.00	1.00	20.61		E		22	10	20.61	24	33.50	37.69		37.69	157.13					157.13
RETORNO UMAE-13	28.00	14.00	1.00	10.96		E		28	14	10.96	24	23.38	25.61		25.61	109.67					109.67
RETORNO UMAE-13	16.00	12.00	1.00	7.19		E		16	12	7.19	24	10.23	11.69		11.69	47.96					47.96
RETORNO UMAE-13	16.00	12.00	1.00	0.25		E		16	12	0.25	24	0.36	0.41		0.41	1.67					1.67
RETORNO UMAE-13	16.00	12.00	1.00	7.15		E		16	12	7.15	24	10.17	11.62		11.62	47.70					47.70
RETORNO UMAE-13	26.00	12.00	1.00	0.34		E		26	12	0.34	24	0.66	0.73		0.73	3.08					3.08
RETORNO UMAE-13	40.00	16.00	1.00	3.50		E		40	16	3.50	22	9.96	10.67		10.67	55.96				55.96	
RETORNO UMAE-13	16.00	6.00	1.00	0.02		E		16	6	0.02	24	0.02	0.03		0.03	0.10					0.10
RETORNO UMAE-13	16.00	6.00	1.00	0.27		E		16	6	0.27	24	0.30	0.36		0.36	1.42					1.42
RETORNO UMAE-13	28.00	14.00	1.00	4.25		E		28	14	4.25	24	9.07	9.93		9.93	42.53					42.53
RETORNO UMAE-13	28.00	14.00	1.00	0.37		E		28	14	0.37	24	0.79	0.86		0.86	3.70					3.70
RETORNO UMAE-13	26.00	12.00	1.00	1.49		E		26	12	1.49	24	2.88	3.18		3.18	13.49					13.49
RETORNO UMAE-13	26.00	12.00	1.00	2.74		E		26	12	2.74	24	5.29	5.85		5.85	24.81					24.81
RETORNO UMAE-13	26.00	12.00	1.00	0.34		E		26	12	0.34	24	0.66	0.73		0.73	3.08					3.08
RETORNO UMAE-13	26.00	12.00	1.00	0.34		E		26	12	0.34	24	0.66	0.73		0.73	3.08					3.08
RETORNO UMAE-13	16.00	12.00	1.00	2.98		E		16	12	2.98	24	4.24	4.84		4.84	19.88					19.88
RETORNO UMAE-13	16.00	12.00	1.00	0.09		E		16	12	0.09	24	0.13	0.15		0.15	0.60					0.60
RETORNO UMAE-13	16.00	12.00	1.00	0.21		E		16	12	0.21	24	0.30	0.34		0.34	1.40					1.40
RETORNO UMAE-13	16.00	12.00	1.00	0.21		E		16	12	0.21	24	0.30	0.34		0.34	1.40					1.40
RETORNO UMAE-13	12.00	4.00	1.00	1.56		E		12	4	1.56	24	1.27	1.58		1.58	5.95					5.95
RETORNO UMAE-13	12.00	4.00	1.00	0.31		E		12	4	0.31	24	0.25	0.31		0.31	1.18					1.18
RETORNO UMAE-13	40.00	16.00	1.00	5.38		E		40	16	5.38	22	15.31	16.40		16.40	86.01				86.01	
RETORNO UMAE-13	40.00	16.00	1.00	2.53		E		40	16	2.53	22	7.20	7.71		7.71	40.45				40.45	
RETORNO UMAE-13	16.00	40.00	1.00	0.77		E		16	40	0.77	22	2.19	2.35		2.35	12.31				12.31	
RETORNO UMAE-13	26.00	12.00	1.00	0.24		E		26	12	0.24	24	0.46	0.51		0.51	2.17					2.17
RETORNO UMAE-13	26.00	12.00	1.00	1.60		E		26	12	1.60	24	3.09	3.41		3.41	14.49					14.49
RETORNO UMAE-13	28.00	14.00	1.00	0.91		E		28	14	0.91	24	1.94	2.13		2.13	9.11					9.11
RETORNO UMAE-13	28.00	14.00	1.00	0.37		E		28	14	0.37	24	0.79	0.86		0.86	3.70					3.70
RETORNO UMAE-14	10.00	4.00	1.00	0.55		E		10	4	0.55	24	0.39	0.50		0.50	1.83					1.83
RETORNO UMAE-14	10.00	4.00	1.00	1.39		E		10	4	1.39	24	0.99	1.27		1.27	4.64					4.64
RETORNO UMAE-14	8.00	8.00	1.00	0.37		E		8	8	0.37	24	0.30	0.38		0.38	1.41					1.41
RETORNO UMAE-14	10.00	4.00	1.00	5.59		E		10	4	5.59	24	3.98	5.11		5.11	18.65					18.65
RETORNO UMAE-14	14.00	8.00	1.00	1.79		E		14	8	1.79	24	2.00	2.36		2.36	9.38					9.38
RETORNO UMAE-14	10.00	4.00	1.00	4.65		E		10	4	4.65	24	3.31	4.25		4.25	15.51					15.51
RETORNO UMAE-14	10.00	4.00	1.00	3.30		E		10	4	3.30	24	2.35	3.02		3.02	11.01					11.01

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
RETORNO UMAE-14	8.00	8.00	1.00	0.35		E		8	8	0.35	24	0.28	0.36		0.36	1.33					1.33
RETORNO UMAE-14	10.00	4.00	1.00	1.84		E		10	4	1.84	24	1.31	1.68		1.68	6.14					6.14
RETORNO UMAE-14	14.00	8.00	1.00	3.16		E		14	8	3.16	24	3.53	4.17		4.17	16.56					16.56
RETORNO UMAE-14	12.00	4.00	1.00	1.50		E		12	4	1.50	24	1.22	1.52		1.52	5.72					5.72
RETORNO UMAE-14	12.00	4.00	1.00	5.61		E		12	4	5.61	24	4.56	5.70		5.70	21.39					21.39
RETORNO UMAE-14	10.00	10.00	1.00	0.37		E		10	10	0.37	24	0.38	0.45		0.45	1.76					1.76
RETORNO UMAE-14	12.00	6.00	1.00	5.19		E		12	6	5.19	24	4.75	5.80		5.80	22.26					22.26
RETORNO UMAE-14	14.00	8.00	1.00	3.17		E		14	8	3.17	24	3.54	4.19		4.19	16.62					16.62
RETORNO UMAE-14	8.00	14.00	1.00	1.00		E		8	14	1.00	24	1.12	1.32		1.32	5.24					5.24
RETORNO UMAE-14	14.00	8.00	1.00	4.05		E		14	8	4.05	24	4.53	5.35		5.35	21.23					21.23
RETORNO UMAE-14	14.00	8.00	1.00	4.20		E		14	8	4.20	24	4.69	5.55		5.55	22.01					22.01
RETORNO UMAE-16	20.00	20.00	1.00	0.37		E		20	20	0.37	24	0.75	0.83		0.83	3.53					3.53
RETORNO UMAE-16	20.00	20.00	1.00	0.37		E		20	20	0.37	24	0.75	0.83		0.83	3.53					3.53
RETORNO UMAE-16	24.00	12.00	1.00	1.05		E		24	12	1.05	24	1.92	2.13		2.13	9.01					9.01
RETORNO UMAE-16	24.00	12.00	1.00	5.52		E		24	12	5.52	24	10.09	11.22		11.22	47.35					47.35
RETORNO UMAE-16	24.00	12.00	1.00	6.42		E		24	12	6.42	24	11.74	13.05		13.05	55.06					55.06
RETORNO UMAE-16	10.00	4.00	1.00	1.17		E		10	4	1.17	24	0.83	1.07		1.07	3.90					3.90
RETORNO UMAE-16	8.00	8.00	1.00	0.42		E		8	8	0.42	24	0.34	0.43		0.43	1.60					1.60
RETORNO UMAE-16	10.00	4.00	1.00	1.37		E		10	4	1.37	24	0.97	1.25		1.25	4.57					4.57
RETORNO UMAE-16	10.00	4.00	1.00	3.31		E		10	4	3.31	24	2.35	3.03		3.03	11.04					11.04
RETORNO UMAE-16	8.00	8.00	1.00	0.57		E		8	8	0.57	24	0.46	0.58		0.58	2.17					2.17
RETORNO UMAE-16	8.00	8.00	1.00	0.57		E		8	8	0.57	24	0.46	0.58		0.58	2.17					2.17
RETORNO UMAE-16	22.00	8.00	1.00	5.04		E		22	8	5.04	24	7.68	8.71		8.71	36.02					36.02
RETORNO UMAE-16	24.00	12.00	1.00	2.24		E		24	12	2.24	24	4.10	4.55		4.55	19.21					19.21
RETORNO UMAE-16	24.00	12.00	1.00	4.17		E		24	12	4.17	24	7.63	8.47		8.47	35.77					35.77
RETORNO UMAE-16	24.00	12.00	1.00	7.94		E		24	12	7.94	24	14.52	16.13		16.13	68.10					68.10
RETORNO UMAE-16	24.00	12.00	1.00	1.56		E		24	12	1.56	24	2.85	3.17		3.17	13.38					13.38
RETORNO UMAE-16	24.00	12.00	1.00	5.28		E		24	12	5.28	24	9.66	10.73		10.73	45.29					45.29
RETORNO UMAE-16	24.00	12.00	1.00	0.90		E		24	12	0.90	24	1.65	1.83		1.83	7.72					7.72
RETORNO UMAE-16	24.00	12.00	1.00	0.32		E		24	12	0.32	24	0.59	0.65		0.65	2.74					2.74
RETORNO UMAE-16	24.00	12.00	1.00	0.32		E		24	12	0.32	24	0.59	0.65		0.65	2.74					2.74
RETORNO UMAE-17	10.00	4.00	1.00	2.79		E		10	4	2.79	24	1.98	2.55		2.55	9.31					9.31
RETORNO UMAE-17	8.00	8.00	1.00	0.57		E		8	8	0.57	24	0.46	0.58		0.58	2.17					2.17
RETORNO UMAE-17	16.00	10.00	1.00	2.83		E		16	10	2.83	24	3.74	4.31		4.31	17.53					17.53
RETORNO UMAE-17	16.00	16.00	1.00	0.37		E		16	16	0.37	24	0.60	0.68		0.68	2.82					2.82
RETORNO UMAE-17	16.00	16.00	1.00	0.37		E		16	16	0.37	24	0.60	0.68		0.68	2.82					2.82
RETORNO UMAE-17	16.00	10.00	1.00	0.11		E		16	10	0.11	24	0.15	0.17		0.17	0.68					0.68
RETORNO UMAE-17	16.00	10.00	1.00	3.03		E		16	10	3.03	24	4.00	4.62		4.62	18.77					18.77
RETORNO UMAE-17	16.00	10.00	1.00	14.93		E		16	10	14.93	24	19.72	22.75		22.75	92.48					92.48
RETORNO UMAE-17	16.00	10.00	1.00	6.35		E		16	10	6.35	24	8.39	9.68		9.68	39.34					39.34
RETORNO UMAE-17	24.00	10.00	1.00	21.31		E		24	10	21.31	24	36.81	41.14		41.14	172.62					172.62
RETORNO UMAE-17	24.00	10.00	1.00	5.63		E		24	10	5.63	24	9.72	10.87		10.87	45.61					45.61
RETORNO UMAE-17	24.00	10.00	1.00	9.32		E		24	10	9.32	24	16.10	17.99		17.99	75.50					75.50
RETORNO UMAE-17	24.00	10.00	1.00	1.67		E		24	10	1.67	24	2.88	3.22		3.22	13.53					13.53
RETORNO UMAE-18	10.00	6.00	1.00	3.84		E		10	6	3.84	24	3.12	3.90		3.90	14.64					14.64
RETORNO UMAE-18	8.00	8.00	1.00	0.47		E		8	8	0.47	24	0.38	0.48		0.48	1.79					1.79
RETORNO UMAE-18	8.00	8.00	1.00	0.47		E		8	8	0.47	24	0.38	0.48		0.48	1.79					1.79
RETORNO UMAE-18	10.00	6.00	1.00	0.07		E		10	6	0.07	24	0.06	0.07		0.07	0.27					0.27
RETORNO UMAE-18	8.00	8.00	1.00	0.44		E		8	8	0.44	24	0.36	0.45		0.45	1.68					1.68
RETORNO UMAE-18	18.00	10.00	1.00	5.85		E		18	10	5.85	24	8.32	9.51		9.51	39.03					39.03
RETORNO UMAE-18	10.00	4.00	1.00	0.54		E		10	4	0.54	24	0.38	0.49		0.49	1.80					1.80
RETORNO UMAE-18	10.00	4.00	1.00	1.30		E		10	4	1.30	24	0.92	1.19		1.19	4.34					4.34
RETORNO UMAE-18	8.00	8.00	1.00	0.57		E		8	8	0.57	24	0.46	0.58		0.58	2.17					2.17
RETORNO UMAE-18	10.00	8.00	1.00	13.44		E		10	8	13.44	24	12.29	15.02		15.02	57.64					57.64
RETORNO UMAE-18	10.00	6.00	1.00	1.31		E		10	6	1.31	24	1.06	1.33		1.33	4.99					4.99
RETORNO UMAE-18	8.00	8.00	1.00	0.55		E		8	8	0.55	24	0.45	0.56		0.56	2.10					2.10
RETORNO UMAE-18	8.00	8.00	1.00	0.55		E		8	8	0.55	24	0.45	0.56		0.56	2.10					2.10
RETORNO UMAE-18	10.00	4.00	1.00	1.58		E		10	4	1.58	24	1.12	1.44		1.44	5.27					5.27
RETORNO UMAE-18	8.00	8.00	1.00	0.57		E		8	8	0.57	24	0.46	0.58		0.58	2.17					2.17

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
RETORNO UMAE-18	10.00	4.00	1.00	1.58	E			10	4	1.58	24	1.12	1.44		1.44	5.27					5.27
RETORNO UMAE-18	8.00	8.00	1.00	0.57	E			8	8	0.57	24	0.46	0.58		0.58	2.17					2.17
RETORNO UMAE-18	16.00	8.00	1.00	4.91	E			16	8	4.91	24	5.99	6.98		6.98	28.08					28.08
RETORNO UMAE-18	12.00	8.00	1.00	5.49	E			12	8	5.49	24	5.58	6.69		6.69	26.16					26.16
RETORNO UMAE-18	18.00	10.00	1.00	0.35	E			18	10	0.35	24	0.50	0.57		0.57	2.33					2.33
RETORNO UMAE-18	8.00	8.00	1.00	0.42	E			8	8	0.42	24	0.34	0.43		0.43	1.60					1.60
RETORNO UMAE-18	20.00	10.00	1.00	6.35	E			20	10	6.35	24	9.68	10.97		10.97	45.39					45.39
RETORNO UMAE-18	20.00	10.00	1.00	0.38	E			20	10	0.38	24	0.58	0.66		0.66	2.72					2.72
RETORNO UMAE-18	20.00	10.00	1.00	1.90	E			20	10	1.90	24	2.90	3.28		3.28	13.58					13.58
RETORNO UMAE-18	20.00	10.00	1.00	1.38	E			20	10	1.38	24	2.10	2.38		2.38	9.86					9.86
RETORNO UMAE-18	20.00	10.00	1.00	0.43	E			20	10	0.43	24	0.66	0.74		0.74	3.07					3.07
RETORNO UMAE-18	20.00	10.00	1.00	0.65	E			20	10	0.65	24	0.99	1.12		1.12	4.65					4.65
RETORNO UMAE-20	10.00	6.00	1.00	3.88	E			10	6	3.88	24	3.15	3.94		3.94	14.79					14.79
RETORNO UMAE-20	22.00	10.00	1.00	2.97	E			22	10	2.97	24	4.83	5.43		5.43	22.64					22.64
RETORNO UMAE-20	22.00	10.00	1.00	2.43	E			22	10	2.43	24	3.95	4.44		4.44	18.53					18.53
RETORNO UMAE-20	10.00	22.00	1.00	0.50	E			10	22	0.50	24	0.81	0.91		0.91	3.81					3.81
RETORNO UMAE-20	10.00	8.00	1.00	2.67	E			10	8	2.67	24	2.44	2.98		2.98	11.45					11.45
RETORNO UMAE-20	10.00	4.00	1.00	1.35	E			10	4	1.35	24	0.96	1.23		1.23	4.50					4.50
RETORNO UMAE-20	10.00	4.00	1.00	0.52	E			10	4	0.52	24	0.37	0.48		0.48	1.73					1.73
RETORNO UMAE-20	8.00	8.00	1.00	0.45	E			8	8	0.45	24	0.37	0.46		0.46	1.72					1.72
RETORNO UMAE-20	10.00	6.00	1.00	6.20	E			10	6	6.20	24	5.04	6.30		6.30	23.63					23.63
RETORNO UMAE-20	10.00	6.00	1.00	2.73	E			10	6	2.73	24	2.22	2.77		2.77	10.41					10.41
RETORNO UMAE-20	10.00	4.00	1.00	2.09	E			10	4	2.09	24	1.49	1.91		1.91	6.97					6.97
RETORNO UMAE-20	10.00	4.00	1.00	0.37	E			10	4	0.37	24	0.26	0.34		0.34	1.23					1.23
RETORNO UMAE-20	8.00	8.00	1.00	0.47	E			8	8	0.47	24	0.38	0.48		0.48	1.79					1.79
RETORNO UMAE-20	10.00	4.00	1.00	3.68	E			10	4	3.68	24	2.62	3.36		3.36	12.27					12.27
RETORNO UMAE-20	10.00	4.00	1.00	18.60	E			10	4	18.60	24	13.23	17.01		17.01	62.04					62.04
RETORNO UMAE-20	10.00	4.00	1.00	0.21	E			10	4	0.21	24	0.15	0.19		0.19	0.70					0.70
RETORNO UMAE-20	10.00	4.00	1.00	0.21	E			10	4	0.21	24	0.15	0.19		0.19	0.70					0.70
RETORNO UMAE-20	10.00	6.00	1.00	0.86	E			10	6	0.86	24	0.70	0.87		0.87	3.28					3.28
RETORNO UMAE-20	10.00	6.00	1.00	12.45	E			10	6	12.45	24	10.12	12.65		12.65	47.46					47.46
RETORNO UMAE-20	8.00	8.00	1.00	0.12	E			8	8	0.12	24	0.10	0.12		0.12	0.46					0.46
RETORNO UMAE-20	8.00	8.00	1.00	0.10	E			8	8	0.10	24	0.08	0.10		0.10	0.38					0.38
RETORNO UMAE-20	10.00	4.00	1.00	3.76	E			10	4	3.76	24	2.67	3.44		3.44	12.54					12.54
RETORNO UMAE-20	10.00	4.00	1.00	0.76	E			10	4	0.76	24	0.54	0.69		0.69	2.54					2.54
RETORNO UMAE-20	8.00	8.00	1.00	0.12	E			8	8	0.12	24	0.10	0.12		0.12	0.46					0.46
RETORNO UMAE-20	10.00	4.00	1.00	1.94	E			10	4	1.94	24	1.38	1.77		1.77	6.47					6.47
RETORNO UMAE-20	8.00	8.00	1.00	0.47	E			8	8	0.47	24	0.38	0.48		0.48	1.79					1.79
RETORNO UMAE-20	10.00	4.00	1.00	1.09	E			10	4	1.09	24	0.78	1.00		1.00	3.64					3.64
RETORNO UMAE-20	10.00	8.00	1.00	6.18	E			10	8	6.18	24	5.65	6.91		6.91	26.50					26.50
RETORNO UMAE-20	10.00	8.00	1.00	1.00	E			10	8	1.00	24	0.91	1.12		1.12	4.29					4.29
RETORNO UMAE-20	10.00	8.00	1.00	0.33	E			10	8	0.33	24	0.30	0.37		0.37	1.42					1.42
RETORNO UMAE-20	10.00	4.00	1.00	1.00	E			10	4	1.00	24	0.71	0.91		0.91	3.34					3.34
RETORNO UMAE-20	10.00	4.00	1.00	0.41	E			10	4	0.41	24	0.29	0.37		0.37	1.37					1.37
RETORNO UMAE-20	10.00	4.00	1.00	1.13	E			10	4	1.13	24	0.80	1.03		1.03	3.77					3.77
RETORNO UMAE-20	14.00	6.00	1.00	10.42	E			14	6	10.42	24	10.59	12.70		12.70	49.65					49.65
RETORNO UMAE-20	8.00	8.00	1.00	0.32	E			8	8	0.32	24	0.26	0.33		0.33	1.22					1.22
RETORNO UMAE-20	10.00	4.00	1.00	1.13	E			10	4	1.13	24	0.80	1.03		1.03	3.77					3.77
RETORNO UMAE-20	8.00	8.00	1.00	0.33	E			8	8	0.33	24	0.27	0.34		0.34	1.26					1.26
RETORNO UMAE-20	10.00	4.00	1.00	1.14	E			10	4	1.14	24	0.81	1.04		1.04	3.80					3.80
RETORNO UMAE-20	10.00	4.00	1.00	1.09	E			10	4	1.09	24	0.78	1.00		1.00	3.64					3.64
RETORNO UMAE-20	10.00	6.00	1.00	12.99	E			10	6	12.99	24	10.56	13.20		13.20	49.52					49.52
RETORNO UMAE-20	8.00	8.00	1.00	0.33	E			8	8	0.33	24	0.27	0.34		0.34	1.26					1.26
RETORNO UMAE-20	8.00	8.00	1.00	0.33	E			8	8	0.33	24	0.27	0.34		0.34	1.26					1.26
RETORNO UMAE-20	14.00	6.00	1.00	6.50	E			14	6	6.50	24	6.60	7.92		7.92	30.97					30.97
RETORNO UMAE-20	14.00	6.00	1.00	2.72	E			14	6	2.72	24	2.76	3.32		3.32	12.96					12.96
RETORNO UMAE-20	10.00	4.00	1.00	5.85	E			10	4	5.85	24	4.16	5.35		5.35	19.51					19.51
RETORNO UMAE-20	10.00	4.00	1.00	0.38	E			10	4	0.38	24	0.27	0.35		0.35	1.27					1.27
RETORNO UMAE-20	8.00	8.00	1.00	0.33	E			8	8	0.33	24	0.27	0.34		0.34	1.26					1.26

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
RETORNO UMAE-20	10.00	4.00	1.00	1.76	E			10	4	1.76	24	1.25	1.61		1.61	5.87					5.87
RETORNO UMAE-20	10.00	6.00	1.00	5.97	E			10	6	5.97	24	4.85	6.07		6.07	22.76					22.76
RETORNO UMAE-20	8.00	8.00	1.00	0.12	E			8	8	0.12	24	0.10	0.12		0.12	0.46					0.46
RETORNO UMAE-20	10.00	4.00	1.00	1.47	E			10	4	1.47	24	1.05	1.34		1.34	4.90					4.90
RETORNO UMAE-20	10.00	4.00	1.00	0.51	E			10	4	0.51	24	0.36	0.47		0.47	1.70					1.70
RETORNO UMAE-20	10.00	6.00	1.00	2.79	E			10	6	2.79	24	2.27	2.83		2.83	10.64					10.64
RETORNO UMAE-20	18.00	8.00	1.00	4.12	E			18	8	4.12	24	5.44	6.28		6.28	25.52					25.52
RETORNO UMAE-20	20.00	10.00	1.00	3.84	E			20	10	3.84	24	5.85	6.63		6.63	27.45					27.45
RETORNO UMAE-20	10.00	4.00	1.00	9.00	E			10	4	9.00	24	6.40	8.23		8.23	30.02					30.02
RETORNO UMAE-20	10.00	6.00	1.00	0.55	E			10	6	0.55	24	0.45	0.56		0.56	2.10					2.10
RETORNO UMAE-20	10.00	6.00	1.00	0.16	E			10	6	0.16	24	0.13	0.16		0.16	0.61					0.61
RETORNO UMAE-20	10.00	4.00	1.00	0.23	E			10	4	0.23	24	0.16	0.21		0.21	0.77					0.77
RETORNO UMAE-20	10.00	4.00	1.00	0.21	E			10	4	0.21	24	0.15	0.19		0.19	0.70					0.70
RETORNO UMAE-20	10.00	4.00	1.00	5.12	E			10	4	5.12	24	3.64	4.68		4.68	17.08					17.08
RETORNO UMAE-20	10.00	4.00	1.00	0.38	E			10	4	0.38	24	0.27	0.35		0.35	1.27					1.27
RETORNO UMAE-20	10.00	4.00	1.00	0.20	E			10	4	0.20	24	0.14	0.18		0.18	0.67					0.67
RETORNO UMAE-20	10.00	4.00	1.00	0.20	E			10	4	0.20	24	0.14	0.18		0.18	0.67					0.67
RETORNO UMAE-20	10.00	4.00	1.00	5.82	E			10	4	5.82	24	4.14	5.32		5.32	19.41					19.41
RETORNO UMAE-20	10.00	4.00	1.00	1.75	E			10	4	1.75	24	1.24	1.60		1.60	5.84					5.84
RETORNO UMAE-20	8.00	8.00	1.00	0.12	E			8	8	0.12	24	0.10	0.12		0.12	0.46					0.46
RETORNO UMAE-20	10.00	6.00	1.00	10.69	E			10	6	10.69	24	8.69	10.86		10.86	40.75					40.75
RETORNO UMAE-20	10.00	4.00	1.00	3.57	E			10	4	3.57	24	2.54	3.26		3.26	11.91					11.91
RETORNO UMAE-20	8.00	8.00	1.00	0.25	E			8	8	0.25	24	0.20	0.25		0.25	0.95					0.95
RETORNO UMAE-20	22.00	10.00	1.00	3.66	E			22	10	3.66	24	5.95	6.69		6.69	27.90					27.90
RETORNO UMAE-20	10.00	4.00	1.00	2.94	E			10	4	2.94	24	2.09	2.69		2.69	9.81					9.81
RETORNO UMAE-20	10.00	4.00	1.00	0.20	E			10	4	0.20	24	0.14	0.18		0.18	0.67					0.67
SUMINISTRO UFCO-01	14.00	6.00	1.00	2.98	E			14	6	2.98	24	3.03	3.63		3.63	14.20					14.20
SUMINISTRO UFCO-01	14.00	6.00	1.00	0.55	E			14	6	0.55	24	0.56	0.67		0.67	2.62					2.62
SUMINISTRO UFCO-01	12.00	12.00	1.00	0.37	E			12	12	0.37	24	0.45	0.53		0.53	2.12					2.12
SUMINISTRO UFCO-02	10.00	4.00	1.00	2.44	E			10	4	2.44	24	1.74	2.23		2.23	8.14					8.14
SUMINISTRO UFCO-02	9.00	9.00	1.00	0.42	E			9	9	0.42	24	0.38	0.47		0.47	1.80					1.80
SUMINISTRO UFCO-03	10.00	4.00	1.00	2.44	E			10	4	2.44	24	1.74	2.23		2.23	8.14					8.14
SUMINISTRO UFCO-03	9.00	9.00	1.00	0.42	E			9	9	0.42	24	0.38	0.47		0.47	1.80					1.80
SUMINISTRO UFCO-04	10.00	4.00	1.00	2.44	E			10	4	2.44	24	1.74	2.23		2.23	8.14					8.14
SUMINISTRO UFCO-04	9.00	9.00	1.00	0.42	E			9	9	0.42	24	0.38	0.47		0.47	1.80					1.80
SUMINISTRO UFCO-05	10.00	4.00	1.00	0.79	E			10	4	0.79	24	0.56	0.72		0.72	2.64					2.64
SUMINISTRO UFCO-05	10.00	4.00	1.00	1.31	E			10	4	1.31	24	0.93	1.20		1.20	4.37					4.37
SUMINISTRO UFCO-05	9.00	9.00	1.00	0.42	E			9	9	0.42	24	0.38	0.47		0.47	1.80					1.80
SUMINISTRO UFCO-10	12.00	6.00	1.00	7.35	E			12	6	7.35	24	6.72	8.21		8.21	31.52					31.52
SUMINISTRO UFCO-10	12.00	6.00	1.00	1.35	E			12	6	1.35	24	1.23	1.51		1.51	5.79					5.79
SUMINISTRO UFCO-10	12.00	12.00	1.00	0.40	E			12	12	0.40	24	0.49	0.57		0.57	2.29					2.29
SUMINISTRO UFCO-11	10.00	6.00	1.00	0.79	E			10	6	0.79	24	0.64	0.80		0.80	3.01					3.01
SUMINISTRO UFCO-11	10.00	6.00	1.00	0.78	E			10	6	0.78	24	0.63	0.79		0.79	2.97					2.97
SUMINISTRO UFCO-11	10.00	6.00	1.00	1.93	E			10	6	1.93	24	1.57	1.96		1.96	7.36					7.36
SUMINISTRO UFCO-11	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UFCO-14	10.00	4.00	1.00	1.84	E			10	4	1.84	24	1.31	1.68		1.68	6.14					6.14
SUMINISTRO UFCO-14	10.00	4.00	1.00	0.53	E			10	4	0.53	24	0.38	0.48		0.48	1.77					1.77
SUMINISTRO UFCO-14	8.00	8.00	1.00	0.44	E			8	8	0.44	24	0.36	0.45		0.45	1.68					1.68
SUMINISTRO UFCO-15	16.00	8.00	1.00	0.50	E			16	8	0.50	24	0.61	0.71		0.71	2.86					2.86
SUMINISTRO UFCO-15	16.00	8.00	1.00	1.11	E			16	8	1.11	24	1.35	1.58		1.58	6.35					6.35
SUMINISTRO UFCO-15	16.00	8.00	1.00	0.92	E			16	8	0.92	24	1.12	1.31		1.31	5.26					5.26
SUMINISTRO UFCO-15	16.00	8.00	1.00	0.25	E			16	8	0.25	24	0.30	0.36		0.36	1.43					1.43
SUMINISTRO UFCO-15	16.00	8.00	1.00	1.21	E			16	8	1.21	24	1.48	1.72		1.72	6.92					6.92
SUMINISTRO UFCO-15	14.00	14.00	1.00	0.19	E			14	14	0.19	24	0.27	0.31		0.31	1.27					1.27
SUMINISTRO UFCO-17	10.00	4.00	1.00	1.60	E			10	4	1.60	24	1.14	1.46		1.46	5.34					5.34
SUMINISTRO UFCO-17	8.00	8.00	1.00	0.05	E			8	8	0.05	24	0.04	0.05		0.05	0.19					0.19
SUMINISTRO UFCO-19	20.00	8.00	1.00	1.58	E			20	8	1.58	24	2.25	2.57		2.57	10.54					10.54
SUMINISTRO UFCO-19	16.00	16.00	1.00	0.45	E			16	16	0.45	24	0.73	0.82		0.82	3.43					3.43
SUMINISTRO UFCO-21	20.00	8.00	1.00	1.58	E			20	8	1.58	24	2.25	2.57		2.57	10.54					10.54

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UFCO-21	16.00	16.00	1.00	0.45	E			16	16	0.45	24	0.73	0.82		0.82	3.43					3.43
SUMINISTRO UFCO-23	10.00	4.00	1.00	2.38	E			10	4	2.38	24	1.69	2.18		2.18	7.94					7.94
SUMINISTRO UFCO-23	10.00	4.00	1.00	7.03	E			10	4	7.03	24	5.00	6.43		6.43	23.45					23.45
SUMINISTRO UFCO-23	8.00	8.00	1.00	0.47	E			8	8	0.47	24	0.38	0.48		0.48	1.79					1.79
SUMINISTRO UFCO-24	10.00	4.00	1.00	2.37	E			10	4	2.37	24	1.69	2.17		2.17	7.91					7.91
SUMINISTRO UFCO-24	10.00	4.00	1.00	7.03	E			10	4	7.03	24	5.00	6.43		6.43	23.45					23.45
SUMINISTRO UFCO-24	8.00	8.00	1.00	0.47	E			8	8	0.47	24	0.38	0.48		0.48	1.79					1.79
SUMINISTRO UFCO-25	10.00	4.00	1.00	2.62	E			10	4	2.62	24	1.86	2.40		2.40	8.74					8.74
SUMINISTRO UFCO-25	10.00	4.00	1.00	6.61	E			10	4	6.61	24	4.70	6.04		6.04	22.05					22.05
SUMINISTRO UFCO-25	8.00	8.00	1.00	0.47	E			8	8	0.47	24	0.38	0.48		0.48	1.79					1.79
SUMINISTRO UFCO-26	10.00	4.00	1.00	2.40	E			10	4	2.40	24	1.71	2.19		2.19	8.01					8.01
SUMINISTRO UFCO-26	10.00	4.00	1.00	7.03	E			10	4	7.03	24	5.00	6.43		6.43	23.45					23.45
SUMINISTRO UFCO-26	8.00	8.00	1.00	0.47	E			8	8	0.47	24	0.38	0.48		0.48	1.79					1.79
SUMINISTRO UMA-02	14.00	8.00	1.00	0.74	E			14	8	0.74	24	0.83	0.98		0.98	3.88					3.88
SUMINISTRO UMA-02	14.00	8.00	1.00	0.73	E			14	8	0.73	24	0.82	0.96		0.96	3.83					3.83
SUMINISTRO UMA-02	16.00	12.00	1.00	2.15	E			16	12	2.15	24	3.06	3.50		3.50	14.34					14.34
SUMINISTRO UMA-02	12.00	6.00	1.00	1.28	E			12	6	1.28	24	1.17	1.43		1.43	5.49					5.49
SUMINISTRO UMA-02	12.00	6.00	1.00	1.29	E			12	6	1.29	24	1.18	1.44		1.44	5.53					5.53
SUMINISTRO UMA-02	16.00	12.00	1.00	0.18	E			16	12	0.18	24	0.26	0.29		0.29	1.20					1.20
SUMINISTRO UMA-02	10.00	10.00	1.00	0.31	E			10	10	0.31	24	0.31	0.38		0.38	1.48					1.48
SUMINISTRO UMA-02	10.00	10.00	1.00	0.31	E			10	10	0.31	24	0.31	0.38		0.38	1.48					1.48
SUMINISTRO UMA-02	10.00	10.00	1.00	0.26	E			10	10	0.26	24	0.26	0.32		0.32	1.24					1.24
SUMINISTRO UMA-02	10.00	10.00	1.00	0.26	E			10	10	0.26	24	0.26	0.32		0.32	1.24					1.24
SUMINISTRO UMAE-01	12.00	6.00	1.00	1.10	E			12	6	1.10	24	1.01	1.23		1.23	4.72					4.72
SUMINISTRO UMAE-01	10.00	10.00	1.00	1.69	E			10	10	1.69	24	1.72	2.06		2.06	8.05					8.05
SUMINISTRO UMAE-01	10.00	4.00	1.00	3.85	E			10	4	3.85	24	2.74	3.52		3.52	12.84					12.84
SUMINISTRO UMAE-01	10.00	4.00	1.00	1.93	E			10	4	1.93	24	1.37	1.76		1.76	6.44					6.44
SUMINISTRO UMAE-01	10.00	4.00	1.00	2.00	E			10	4	2.00	24	1.42	1.83		1.83	6.67					6.67
SUMINISTRO UMAE-01	10.00	4.00	1.00	2.00	E			10	4	2.00	24	1.42	1.83		1.83	6.67					6.67
SUMINISTRO UMAE-01	22.00	10.00	1.00	0.88	E			22	10	0.88	24	1.43	1.61		1.61	6.71					6.71
SUMINISTRO UMAE-01	16.00	10.00	1.00	4.21	E			16	10	4.21	24	5.56	6.42		6.42	26.08					26.08
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.42	E			9	9	0.42	24	0.38	0.47		0.47	1.80					1.80
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.40	E			9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.42	E			9	9	0.42	24	0.38	0.47		0.47	1.80					1.80
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.40	E			9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.42	E			9	9	0.42	24	0.38	0.47		0.47	1.80					1.80
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.40	E			9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.42	E			9	9	0.42	24	0.38	0.47		0.47	1.80					1.80
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.40	E			9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.42	E			9	9	0.42	24	0.38	0.47		0.47	1.80					1.80
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.42	E			9	9	0.42	24	0.38	0.47		0.47	1.80					1.80
SUMINISTRO UMAE-01	10.00	4.00	1.00	1.84	E			10	4	1.84	24	1.31	1.68		1.68	6.14					6.14
SUMINISTRO UMAE-01	10.00	6.00	1.00	3.65	E			10	6	3.65	24	2.97	3.71		3.71	13.91					13.91
SUMINISTRO UMAE-01	14.00	6.00	1.00	3.12	E			14	6	3.12	24	3.17	3.80		3.80	14.87					14.87
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.40	E			9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-01	10.00	4.00	1.00	0.62	E			10	4	0.62	24	0.44	0.57		0.57	2.07					2.07
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.42	E			9	9	0.42	24	0.38	0.47		0.47	1.80					1.80
SUMINISTRO UMAE-01	10.00	4.00	1.00	0.55	E			10	4	0.55	24	0.39	0.50		0.50	1.83					1.83
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.42	E			9	9	0.42	24	0.38	0.47		0.47	1.80					1.80
SUMINISTRO UMAE-01	10.00	4.00	1.00	0.69	E			10	4	0.69	24	0.49	0.63		0.63	2.30					2.30
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.42	E			9	9	0.42	24	0.38	0.47		0.47	1.80					1.80
SUMINISTRO UMAE-01	12.00	6.00	1.00	1.17	E			12	6	1.17	24	1.07	1.31		1.31	5.02					5.02
SUMINISTRO UMAE-01	10.00	4.00	1.00	1.16	E			10	4	1.16	24	0.82	1.06		1.06	3.87					3.87
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.42	E			9	9	0.42	24	0.38	0.47		0.47	1.80					1.80
SUMINISTRO UMAE-01	10.00	4.00	1.00	7.76	E			10	4	7.76	24	5.52	7.10		7.10	25.88					25.88
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.42	E			9	9	0.42	24	0.38	0.47		0.47	1.80					1.80
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.40	E			9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.42	E			9	9	0.42	24	0.38	0.47		0.47	1.80					1.80

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.40	E			9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-01	12.00	6.00	1.00	4.86	E			12	6	4.86	24	4.44	5.43		5.43	20.84					20.84
SUMINISTRO UMAE-01	10.00	4.00	1.00	2.00	E			10	4	2.00	24	1.42	1.83		1.83	6.67					6.67
SUMINISTRO UMAE-01	12.00	6.00	1.00	1.20	E			12	6	1.20	24	1.10	1.34		1.34	5.15					5.15
SUMINISTRO UMAE-01	12.00	6.00	1.00	1.07	E			12	6	1.07	24	0.98	1.20		1.20	4.59					4.59
SUMINISTRO UMAE-01	12.00	6.00	1.00	1.15	E			12	6	1.15	24	1.05	1.29		1.29	4.93					4.93
SUMINISTRO UMAE-01	10.00	4.00	1.00	3.02	E			10	4	3.02	24	2.15	2.76		2.76	10.07					10.07
SUMINISTRO UMAE-01	12.00	10.00	1.00	5.72	E			12	10	5.72	24	6.39	7.55		7.55	29.98					29.98
SUMINISTRO UMAE-01	26.00	10.00	1.00	4.63	E			26	10	4.63	24	8.47	9.41		9.41	39.71					39.71
SUMINISTRO UMAE-01	10.00	6.00	1.00	3.49	E			10	6	3.49	24	2.84	3.55		3.55	13.30					13.30
SUMINISTRO UMAE-01	10.00	6.00	1.00	5.61	E			10	6	5.61	24	4.56	5.70		5.70	21.39					21.39
SUMINISTRO UMAE-01	14.00	6.00	1.00	0.04	E			14	6	0.04	24	0.04	0.05		0.05	0.19					0.19
SUMINISTRO UMAE-01	10.00	4.00	1.00	1.51	E			10	4	1.51	24	1.07	1.38		1.38	5.04					5.04
SUMINISTRO UMAE-01	24.00	12.00	1.00	10.77	E			24	12	10.77	24	19.70	21.88		21.88	92.38					92.38
SUMINISTRO UMAE-01	26.00	14.00	1.00	10.02	E			26	14	10.02	24	20.36	22.40		22.40	95.49					95.49
SUMINISTRO UMAE-01	26.00	14.00	1.00	0.52	E			26	14	0.52	24	1.06	1.16		1.16	4.96					4.96
SUMINISTRO UMAE-01	26.00	14.00	1.00	0.88	E			26	14	0.88	24	1.79	1.97		1.97	8.39					8.39
SUMINISTRO UMAE-01	26.00	14.00	1.00	1.81	E			26	14	1.81	24	3.68	4.05		4.05	17.25					17.25
SUMINISTRO UMAE-02	20.00	12.00	1.00	0.78	E			20	12	0.78	24	1.27	1.43		1.43	5.95					5.95
SUMINISTRO UMAE-02	20.00	12.00	1.00	3.49	E			20	12	3.49	24	5.67	6.38		6.38	26.61					26.61
SUMINISTRO UMAE-02	16.00	10.00	1.00	2.00	E			16	10	2.00	24	2.64	3.05		3.05	12.39					12.39
SUMINISTRO UMAE-02	12.00	6.00	1.00	1.02	E			12	6	1.02	24	0.93	1.14		1.14	4.37					4.37
SUMINISTRO UMAE-02	12.00	6.00	1.00	0.93	E			12	6	0.93	24	0.85	1.04		1.04	3.99					3.99
SUMINISTRO UMAE-02	12.00	12.00	1.00	0.37	E			12	12	0.37	24	0.45	0.53		0.53	2.12					2.12
SUMINISTRO UMAE-02	12.00	12.00	1.00	0.37	E			12	12	0.37	24	0.45	0.53		0.53	2.12					2.12
SUMINISTRO UMAE-02	12.00	6.00	1.00	0.97	E			12	6	0.97	24	0.89	1.08		1.08	4.16					4.16
SUMINISTRO UMAE-02	12.00	6.00	1.00	0.88	E			12	6	0.88	24	0.80	0.98		0.98	3.77					3.77
SUMINISTRO UMAE-02	12.00	12.00	1.00	0.37	E			12	12	0.37	24	0.45	0.53		0.53	2.12					2.12
SUMINISTRO UMAE-02	12.00	12.00	1.00	0.37	E			12	12	0.37	24	0.45	0.53		0.53	2.12					2.12
SUMINISTRO UMAE-02	14.00	6.00	1.00	1.11	E			14	6	1.11	24	1.13	1.35		1.35	5.29					5.29
SUMINISTRO UMAE-02	14.00	6.00	1.00	0.56	E			14	6	0.56	24	0.57	0.68		0.68	2.67					2.67
SUMINISTRO UMAE-02	14.00	6.00	1.00	0.05	E			14	6	0.05	24	0.05	0.06		0.06	0.24					0.24
SUMINISTRO UMAE-02	12.00	12.00	1.00	0.37	E			12	12	0.37	24	0.45	0.53		0.53	2.12					2.12
SUMINISTRO UMAE-02	20.00	12.00	1.00	0.54	E			20	12	0.54	24	0.88	0.99		0.99	4.12					4.12
SUMINISTRO UMAE-02	20.00	12.00	1.00	1.26	E			20	12	1.26	24	2.05	2.30		2.30	9.61					9.61
SUMINISTRO UMAE-02	20.00	12.00	1.00	0.29	E			20	12	0.29	24	0.47	0.53		0.53	2.21					2.21
SUMINISTRO UMAE-02	20.00	12.00	1.00	2.12	E			20	12	2.12	24	3.45	3.88		3.88	16.16					16.16
SUMINISTRO UMAE-03	10.00	6.00	1.00	1.14	E			10	6	1.14	24	0.93	1.16		1.16	4.35					4.35
SUMINISTRO UMAE-03	10.00	6.00	1.00	3.93	E			10	6	3.93	24	3.19	3.99		3.99	14.98					14.98
SUMINISTRO UMAE-03	12.00	10.00	1.00	0.86	E			12	10	0.86	24	0.96	1.14		1.14	4.51					4.51
SUMINISTRO UMAE-03	12.00	10.00	1.00	1.16	E			12	10	1.16	24	1.30	1.53		1.53	6.08					6.08
SUMINISTRO UMAE-03	10.00	6.00	1.00	0.87	E			10	6	0.87	24	0.71	0.88		0.88	3.32					3.32
SUMINISTRO UMAE-03	9.00	9.00	1.00	0.30	E			9	9	0.30	24	0.27	0.34		0.34	1.29					1.29
SUMINISTRO UMAE-03	10.00	6.00	1.00	0.85	E			10	6	0.85	24	0.69	0.86		0.86	3.24					3.24
SUMINISTRO UMAE-03	10.00	8.00	1.00	2.20	E			10	8	2.20	24	2.01	2.46		2.46	9.43					9.43
SUMINISTRO UMAE-03	9.00	9.00	1.00	0.30	E			9	9	0.30	24	0.27	0.34		0.34	1.29					1.29
SUMINISTRO UMAE-03	10.00	6.00	1.00	0.29	E			10	6	0.29	24	0.24	0.29		0.29	1.11					1.11
SUMINISTRO UMAE-03	9.00	9.00	1.00	0.30	E			9	9	0.30	24	0.27	0.34		0.34	1.29					1.29
SUMINISTRO UMAE-03	12.00	10.00	1.00	0.59	E			12	10	0.59	24	0.66	0.78		0.78	3.09					3.09
SUMINISTRO UMAE-03	12.00	10.00	1.00	2.46	E			12	10	2.46	24	2.75	3.25		3.25	12.89					12.89
SUMINISTRO UMAE-03	12.00	10.00	1.00	2.43	E			12	10	2.43	24	2.72	3.21		3.21	12.74					12.74
SUMINISTRO UMAE-04	32.00	18.00	1.00	3.65	E			32	18	3.65	22	9.27	10.01		10.01	52.10				52.10	
SUMINISTRO UMAE-04	32.00	18.00	1.00	9.98	E			32	18	9.98	22	25.35	27.38		27.38	142.46				142.46	
SUMINISTRO UMAE-04	32.00	18.00	1.00	8.75	E			32	18	8.75	22	22.23	24.00		24.00	124.90				124.90	
SUMINISTRO UMAE-04	32.00	18.00	1.00	2.08	E			32	18	2.08	22	5.28	5.71		5.71	29.69				29.69	
SUMINISTRO UMAE-04	32.00	18.00	1.00	13.85	E			32	18	13.85	22	35.18	37.99		37.99	197.71				197.71	
SUMINISTRO UMAE-04	32.00	18.00	1.00	10.40	E			32	18	10.40	22	26.42	28.53		28.53	148.46				148.46	
SUMINISTRO UMAE-04	10.00	4.00	1.00	1.68	E			10	4	1.68	24	1.19	1.54		1.54	5.60					5.60
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.49	E			10	4	0.49	24	0.35	0.45		0.45	1.63					1.63

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-04	10.00	4.00	1.00	1.43		E		10	4	1.43	24	1.02	1.31		1.31	4.77					4.77
SUMINISTRO UMAE-04	10.00	4.00	1.00	1.19		E		10	4	1.19	24	0.85	1.09		1.09	3.97					3.97
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.65		E		10	4	0.65	24	0.46	0.59		0.59	2.17					2.17
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.36		E		10	4	0.36	24	0.26	0.33		0.33	1.20					1.20
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.42		E		10	4	0.42	24	0.30	0.38		0.38	1.40					1.40
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-04	10.00	4.00	1.00	2.22		E		10	4	2.22	24	1.58	2.03		2.03	7.40					7.40
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.31		E		9	9	0.31	24	0.28	0.35		0.35	1.33					1.33
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.34		E		9	9	0.34	24	0.31	0.38		0.38	1.46					1.46
SUMINISTRO UMAE-04	10.00	6.00	1.00	2.13		E		10	6	2.13	24	1.73	2.16		2.16	8.12					8.12
SUMINISTRO UMAE-04	10.00	8.00	1.00	1.32		E		10	8	1.32	24	1.21	1.48		1.48	5.66					5.66
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-04	32.00	18.00	1.00	5.61		E		32	18	5.61	22	14.25	15.39		15.39	80.08			80.08		
SUMINISTRO UMAE-04	10.00	8.00	1.00	3.86		E		10	8	3.86	24	3.53	4.31		4.31	16.55					16.55
SUMINISTRO UMAE-04	10.00	6.00	1.00	2.68		E		10	6	2.68	24	2.18	2.72		2.72	10.22					10.22
SUMINISTRO UMAE-04	10.00	4.00	1.00	4.25		E		10	4	4.25	24	3.02	3.89		3.89	14.18					14.18
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.03		E		9	9	0.03	24	0.03	0.03		0.03	0.13					0.13
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.03		E		9	9	0.03	24	0.03	0.03		0.03	0.13					0.13
SUMINISTRO UMAE-04	10.00	4.00	1.00	1.56		E		10	4	1.56	24	1.11	1.43		1.43	5.20					5.20
SUMINISTRO UMAE-04	10.00	4.00	1.00	1.77		E		10	4	1.77	24	1.26	1.62		1.62	5.90					5.90
SUMINISTRO UMAE-04	10.00	4.00	1.00	1.51		E		10	4	1.51	24	1.07	1.38		1.38	5.04					5.04
SUMINISTRO UMAE-04	10.00	4.00	1.00	1.69		E		10	4	1.69	24	1.20	1.55		1.55	5.64					5.64
SUMINISTRO UMAE-04	10.00	4.00	1.00	1.68		E		10	4	1.68	24	1.19	1.54		1.54	5.60					5.60
SUMINISTRO UMAE-04	10.00	4.00	1.00	1.49		E		10	4	1.49	24	1.06	1.36		1.36	4.97					4.97
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.03		E		9	9	0.03	24	0.03	0.03		0.03	0.13					0.13
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.03		E		9	9	0.03	24	0.03	0.03		0.03	0.13					0.13
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.03		E		9	9	0.03	24	0.03	0.03		0.03	0.13					0.13
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.03		E		9	9	0.03	24	0.03	0.03		0.03	0.13					0.13
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.03		E		9	9	0.03	24	0.03	0.03		0.03	0.13					0.13
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.03		E		9	9	0.03	24	0.03	0.03		0.03	0.13					0.13
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.03		E		9	9	0.03	24	0.03	0.03		0.03	0.13					0.13
SUMINISTRO UMAE-04	16.00	10.00	1.00	1.22		E		16	10	1.22	24	1.61	1.86		1.86	7.56					7.56
SUMINISTRO UMAE-04	10.00	4.00	1.00	1.74		E		10	4	1.74	24	1.24	1.59		1.59	5.80					5.80
SUMINISTRO UMAE-04	10.00	4.00	1.00	2.27		E		10	4	2.27	24	1.61	2.08		2.08	7.57					7.57
SUMINISTRO UMAE-04	10.00	4.00	1.00	1.63		E		10	4	1.63	24	1.16	1.49		1.49	5.44					5.44
SUMINISTRO UMAE-04	10.00	4.00	1.00	2.17		E		10	4	2.17	24	1.54	1.98		1.98	7.24					7.24
SUMINISTRO UMAE-04	10.00	4.00	1.00	1.73		E		10	4	1.73	24	1.23	1.58		1.58	5.77					5.77
SUMINISTRO UMAE-04	10.00	4.00	1.00	2.27		E		10	4	2.27	24	1.61	2.08		2.08	7.57					7.57
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-04	18.00	8.00	1.00	0.71		E		18	8	0.71	24	0.94	1.08		1.08	4.40					4.40
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-04	18.00	10.00	1.00	12.43		E		18	10	12.43	24	17.68	20.21		20.21	82.92					82.92
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-04	20.00	10.00	1.00	3.84		E		20	10	3.84	24	5.85	6.63		6.63	27.45					27.45
SUMINISTRO UMAE-04	24.00	10.00	1.00	3.40		E		24	10	3.40	24	5.87	6.56		6.56	27.54					27.54
SUMINISTRO UMAE-04	28.00	16.00	1.00	10.32		E		28	16	10.32	24	23.07	25.16		25.16	108.19					108.19
SUMINISTRO UMAE-04	10.00	4.00	1.00	3.01		E		10	4	3.01	24	2.14	2.75		2.75	10.04					10.04

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-04	14.00	4.00	1.00	1.02	E			14	4	1.02	24	0.93	1.14		1.14	4.37					4.37
SUMINISTRO UMAE-04	10.00	4.00	1.00	1.89	E			10	4	1.89	24	1.34	1.73		1.73	6.30					6.30
SUMINISTRO UMAE-04	14.00	8.00	1.00	3.47	E			14	8	3.47	24	3.88	4.58		4.58	18.19					18.19
SUMINISTRO UMAE-04	12.00	4.00	1.00	0.80	E			12	4	0.80	24	0.65	0.81		0.81	3.05					3.05
SUMINISTRO UMAE-04	12.00	4.00	1.00	1.47	E			12	4	1.47	24	1.19	1.49		1.49	5.60					5.60
SUMINISTRO UMAE-04	12.00	12.00	1.00	0.34	E			12	12	0.34	24	0.41	0.48		0.48	1.94					1.94
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.36	E			9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-04	16.00	10.00	1.00	2.07	E			16	10	2.07	24	2.73	3.15		3.15	12.82					12.82
SUMINISTRO UMAE-04	28.00	16.00	1.00	5.03	E			28	16	5.03	24	11.24	12.27		12.27	52.73					52.73
SUMINISTRO UMAE-04	16.00	10.00	1.00	3.36	E			16	10	3.36	24	4.44	5.12		5.12	20.81					20.81
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.36	E			9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-04	10.00	4.00	1.00	2.24	E			10	4	2.24	24	1.59	2.05		2.05	7.47					7.47
SUMINISTRO UMAE-04	10.00	4.00	1.00	2.50	E			10	4	2.50	24	1.78	2.29		2.29	8.34					8.34
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.36	E			9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-04	12.00	6.00	1.00	2.21	E			12	6	2.21	24	2.02	2.47		2.47	9.48					9.48
SUMINISTRO UMAE-04	12.00	8.00	1.00	3.45	E			12	8	3.45	24	3.51	4.21		4.21	16.44					16.44
SUMINISTRO UMAE-04	12.00	12.00	1.00	0.31	E			12	12	0.31	24	0.38	0.44		0.44	1.77					1.77
SUMINISTRO UMAE-04	26.00	12.00	1.00	4.37	E			26	12	4.37	24	8.44	9.32		9.32	39.56					39.56
SUMINISTRO UMAE-04	12.00	12.00	1.00	0.34	E			12	12	0.34	24	0.41	0.48		0.48	1.94					1.94
SUMINISTRO UMAE-04	12.00	12.00	1.00	0.34	E			12	12	0.34	24	0.41	0.48		0.48	1.94					1.94
SUMINISTRO UMAE-04	14.00	8.00	1.00	3.24	E			14	8	3.24	24	3.62	4.28		4.28	16.98					16.98
SUMINISTRO UMAE-04	10.00	8.00	1.00	0.70	E			10	8	0.70	24	0.64	0.78		0.78	3.00					3.00
SUMINISTRO UMAE-04	10.00	8.00	1.00	0.10	E			10	8	0.10	24	0.09	0.11		0.11	0.43					0.43
SUMINISTRO UMAE-04	10.00	8.00	1.00	0.23	E			10	8	0.23	24	0.21	0.26		0.26	0.99					0.99
SUMINISTRO UMAE-04	32.00	18.00	1.00	0.57	E			32	18	0.57	22	1.45	1.56		1.56	8.14				8.14	
SUMINISTRO UMAE-04	10.00	8.00	1.00	0.23	E			10	8	0.23	24	0.21	0.26		0.26	0.99					0.99
SUMINISTRO UMAE-04	18.00	10.00	1.00	1.97	E			18	10	1.97	24	2.80	3.20		3.20	13.14					13.14
SUMINISTRO UMAE-04	18.00	10.00	1.00	0.25	E			18	10	0.25	24	0.36	0.41		0.41	1.67					1.67
SUMINISTRO UMAE-04	26.00	12.00	1.00	0.72	E			26	12	0.72	24	1.39	1.54		1.54	6.52					6.52
SUMINISTRO UMAE-04	26.00	12.00	1.00	0.13	E			26	12	0.13	24	0.25	0.28		0.28	1.18					1.18
SUMINISTRO UMAE-04	24.00	10.00	1.00	2.77	E			24	10	2.77	24	4.78	5.35		5.35	22.44					22.44
SUMINISTRO UMAE-04	24.00	10.00	1.00	0.56	E			24	10	0.56	24	0.97	1.08		1.08	4.54					4.54
SUMINISTRO UMAE-04	24.00	10.00	1.00	3.32	E			24	10	3.32	24	5.73	6.41		6.41	26.89					26.89
SUMINISTRO UMAE-04	24.00	10.00	1.00	0.56	E			24	10	0.56	24	0.97	1.08		1.08	4.54					4.54
SUMINISTRO UMAE-04	32.00	18.00	1.00	1.16	E			32	18	1.16	22	2.95	3.18		3.18	16.56				16.56	
SUMINISTRO UMAE-04	32.00	18.00	1.00	0.41	E			32	18	0.41	22	1.04	1.12		1.12	5.85				5.85	
SUMINISTRO UMAE-05	30.00	16.00	1.00	3.62	E			30	16	3.62	24	8.46	9.19		9.19	39.67					39.67
SUMINISTRO UMAE-05	30.00	16.00	1.00	6.09	E			30	16	6.09	24	14.23	15.47		15.47	66.74					66.74
SUMINISTRO UMAE-05	30.00	16.00	1.00	4.96	E			30	16	4.96	24	11.59	12.60		12.60	54.36					54.36
SUMINISTRO UMAE-05	30.00	16.00	1.00	9.52	E			30	16	9.52	24	22.25	24.18		24.18	104.34					104.34
SUMINISTRO UMAE-05	30.00	16.00	1.00	7.10	E			30	16	7.10	24	16.59	18.03		18.03	77.81					77.81
SUMINISTRO UMAE-05	30.00	16.00	1.00	7.26	E			30	16	7.26	24	16.97	18.44		18.44	79.57					79.57
SUMINISTRO UMAE-05	30.00	16.00	1.00	6.09	E			30	16	6.09	24	14.23	15.47		15.47	66.74					66.74
SUMINISTRO UMAE-05	30.00	16.00	1.00	1.46	E			30	16	1.46	24	3.41	3.71		3.71	16.00					16.00
SUMINISTRO UMAE-05	20.00	12.00	1.00	3.58	E			20	12	3.58	24	5.82	6.55		6.55	27.29					27.29
SUMINISTRO UMAE-05	10.00	4.00	1.00	3.94	E			10	4	3.94	24	2.80	3.60		3.60	13.14					13.14
SUMINISTRO UMAE-05	10.00	4.00	1.00	3.57	E			10	4	3.57	24	2.54	3.26		3.26	11.91					11.91
SUMINISTRO UMAE-05	14.00	4.00	1.00	2.75	E			14	4	2.75	24	2.51	3.07		3.07	11.79					11.79
SUMINISTRO UMAE-05	14.00	4.00	1.00	2.69	E			14	4	2.69	24	2.46	3.01		3.01	11.54					11.54
SUMINISTRO UMAE-05	10.00	4.00	1.00	1.91	E			10	4	1.91	24	1.36	1.75		1.75	6.37					6.37
SUMINISTRO UMAE-05	10.00	4.00	1.00	4.07	E			10	4	4.07	24	2.89	3.72		3.72	13.58					13.58
SUMINISTRO UMAE-05	14.00	6.00	1.00	3.39	E			14	6	3.39	24	3.44	4.13		4.13	16.15					16.15
SUMINISTRO UMAE-05	12.00	6.00	1.00	2.81	E			12	6	2.81	24	2.57	3.14		3.14	12.05					12.05
SUMINISTRO UMAE-05	10.00	4.00	1.00	1.36	E			10	4	1.36	24	0.97	1.24		1.24	4.54					4.54
SUMINISTRO UMAE-05	10.00	4.00	1.00	1.24	E			10	4	1.24	24	0.88	1.13		1.13	4.14					4.14
SUMINISTRO UMAE-05	10.00	6.00	1.00	3.71	E			10	6	3.71	24	3.02	3.77		3.77	14.14					14.14
SUMINISTRO UMAE-05	10.00	4.00	1.00	0.89	E			10	4	0.89	24	0.63	0.81		0.81	2.97					2.97
SUMINISTRO UMAE-05	10.00	4.00	1.00	2.07	E			10	4	2.07	24	1.47	1.89		1.89	6.90					6.90
SUMINISTRO UMAE-05	10.00	6.00	1.00	2.82	E			10	6	2.82	24	2.29	2.87		2.87	10.75					10.75

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-05	10.00	4.00	1.00	1.76		E		10	4	1.76	24	1.25	1.61		1.61	5.87					5.87
SUMINISTRO UMAE-05	10.00	4.00	1.00	1.25		E		10	4	1.25	24	0.89	1.14		1.14	4.17					4.17
SUMINISTRO UMAE-05	12.00	6.00	1.00	0.85		E		12	6	0.85	24	0.78	0.95		0.95	3.65					3.65
SUMINISTRO UMAE-05	12.00	8.00	1.00	2.07		E		12	8	2.07	24	2.10	2.52		2.52	9.86					9.86
SUMINISTRO UMAE-05	12.00	8.00	1.00	4.66		E		12	8	4.66	24	4.73	5.68		5.68	22.21					22.21
SUMINISTRO UMAE-05	10.00	6.00	1.00	0.59		E		10	6	0.59	24	0.48	0.60		0.60	2.25					2.25
SUMINISTRO UMAE-05	10.00	6.00	1.00	3.42		E		10	6	3.42	24	2.78	3.47		3.47	13.04					13.04
SUMINISTRO UMAE-05	10.00	4.00	1.00	1.40		E		10	4	1.40	24	1.00	1.28		1.28	4.67					4.67
SUMINISTRO UMAE-05	10.00	4.00	1.00	0.60		E		10	4	0.60	24	0.43	0.55		0.55	2.00					2.00
SUMINISTRO UMAE-05	14.00	8.00	1.00	3.09		E		14	8	3.09	24	3.45	4.08		4.08	16.20					16.20
SUMINISTRO UMAE-05	10.00	4.00	1.00	1.80		E		10	4	1.80	24	1.28	1.65		1.65	6.00					6.00
SUMINISTRO UMAE-05	10.00	4.00	1.00	0.88		E		10	4	0.88	24	0.63	0.80		0.80	2.94					2.94
SUMINISTRO UMAE-05	12.00	8.00	1.00	3.71		E		12	8	3.71	24	3.77	4.52		4.52	17.68					17.68
SUMINISTRO UMAE-05	10.00	4.00	1.00	1.65		E		10	4	1.65	24	1.17	1.51		1.51	5.50					5.50
SUMINISTRO UMAE-05	10.00	4.00	1.00	1.87		E		10	4	1.87	24	1.33	1.71		1.71	6.24					6.24
SUMINISTRO UMAE-05	10.00	4.00	1.00	1.89		E		10	4	1.89	24	1.34	1.73		1.73	6.30					6.30
SUMINISTRO UMAE-05	10.00	4.00	1.00	1.68		E		10	4	1.68	24	1.19	1.54		1.54	5.60					5.60
SUMINISTRO UMAE-05	10.00	4.00	1.00	3.75		E		10	4	3.75	24	2.67	3.43		3.43	12.51					12.51
SUMINISTRO UMAE-05	16.00	8.00	1.00	4.54		E		16	8	4.54	24	5.54	6.46		6.46	25.96					25.96
SUMINISTRO UMAE-05	12.00	12.00	1.00	0.34		E		12	12	0.34	24	0.41	0.48		0.48	1.94					1.94
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-05	16.00	10.00	1.00	1.78		E		16	10	1.78	24	2.35	2.71		2.71	11.03					11.03
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-05	18.00	10.00	1.00	4.23		E		18	10	4.23	24	6.02	6.88		6.88	28.22					28.22
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.34		E		9	9	0.34	24	0.31	0.38		0.38	1.46					1.46
SUMINISTRO UMAE-05	12.00	6.00	1.00	1.13		E		12	6	1.13	24	1.03	1.26		1.26	4.85					4.85
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-05	12.00	6.00	1.00	3.20		E		12	6	3.20	24	2.93	3.58		3.58	13.72					13.72
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.34		E		9	9	0.34	24	0.31	0.38		0.38	1.46					1.46
SUMINISTRO UMAE-05	20.00	14.00	1.00	5.31		E		20	14	5.31	24	9.17	10.25		10.25	43.01					43.01
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.49		E		9	9	0.49	24	0.45	0.55		0.55	2.10					2.10
SUMINISTRO UMAE-05	14.00	10.00	1.00	3.23		E		14	10	3.23	24	3.94	4.59		4.59	18.47					18.47
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-05	22.00	16.00	1.00	5.41		E		22	16	5.41	24	10.44	11.54		11.54	48.98					48.98
SUMINISTRO UMAE-05	30.00	16.00	1.00	18.95		E		30	16	18.95	24	44.28	48.13		48.13	207.68					207.68
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-05	12.00	6.00	1.00	2.44		E		12	6	2.44	24	2.23	2.73		2.73	10.46					10.46
SUMINISTRO UMAE-05	12.00	12.00	1.00	0.34		E		12	12	0.34	24	0.41	0.48		0.48	1.94					1.94
SUMINISTRO UMAE-05	12.00	12.00	1.00	0.34		E		12	12	0.34	24	0.41	0.48		0.48	1.94					1.94
SUMINISTRO UMAE-05	14.00	8.00	1.00	9.68		E		14	8	9.68	24	10.82	12.79		12.79	50.74					50.74
SUMINISTRO UMAE-05	10.00	4.00	1.00	1.55		E		10	4	1.55	24	1.10	1.42		1.42	5.17					5.17
SUMINISTRO UMAE-05	10.00	4.00	1.00	2.08		E		10	4	2.08	24	1.48	1.90		1.90	6.94					6.94
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.36		E		9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-05	30.00	16.00	1.00	7.98		E		30	16	7.98	24	18.65	20.27		20.27	87.46					87.46
SUMINISTRO UMAE-05	10.00	4.00	1.00	0.46		E		10	4	0.46	24	0.33	0.42		0.42	1.53					1.53
SUMINISTRO UMAE-05	30.00	16.00	1.00	1.28		E		30	16	1.28	24	2.99	3.25		3.25	14.03					14.03
SUMINISTRO UMAE-05	30.00	16.00	1.00	1.79		E		30	16	1.79	24	4.18	4.55		4.55	19.62					19.62

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-09	16.00	16.00	1.00	14.27	E			16	16	14.27	24	23.20	26.10		26.10	108.80					108.80
SUMINISTRO UMAE-09	16.00	16.00	1.00	0.95	E			16	16	0.95	24	1.54	1.74		1.74	7.24					7.24
SUMINISTRO UMAE-09	12.00	14.00	1.00	1.50	E			12	14	1.50	24	1.98	2.29		2.29	9.29					9.29
SUMINISTRO UMAE-09	12.00	14.00	1.00	1.68	E			12	14	1.68	24	2.22	2.56		2.56	10.41					10.41
SUMINISTRO UMAE-09	12.00	14.00	1.00	6.72	E			12	14	6.72	24	8.88	10.24		10.24	41.63					41.63
SUMINISTRO UMAE-09	12.00	14.00	1.00	0.57	E			12	14	0.57	24	0.75	0.87		0.87	3.53					3.53
SUMINISTRO UMAE-09	12.00	14.00	1.00	0.46	E			12	14	0.46	24	0.61	0.70		0.70	2.85					2.85
SUMINISTRO UMAE-09	12.00	14.00	1.00	0.17	E			12	14	0.17	24	0.22	0.26		0.26	1.05					1.05
SUMINISTRO UMAE-09	12.00	14.00	1.00	0.55	E			12	14	0.55	24	0.73	0.84		0.84	3.41					3.41
SUMINISTRO UMAE-09	12.00	14.00	1.00	0.45	E			12	14	0.45	24	0.59	0.69		0.69	2.79					2.79
SUMINISTRO UMAE-09	12.00	14.00	1.00	0.17	E			12	14	0.17	24	0.22	0.26		0.26	1.05					1.05
SUMINISTRO UMAE-09	16.00	16.00	1.00	1.07	E			16	16	1.07	24	1.74	1.96		1.96	8.16					8.16
SUMINISTRO UMAE-09	16.00	16.00	1.00	0.24	E			16	16	0.24	24	0.39	0.44		0.44	1.83					1.83
SUMINISTRO UMAE-09	16.00	16.00	1.00	0.47	E			16	16	0.47	24	0.76	0.86		0.86	3.58					3.58
SUMINISTRO UMAE-09	16.00	16.00	1.00	0.83	E			16	16	0.83	24	1.35	1.52		1.52	6.33					6.33
SUMINISTRO UMAE-09	16.00	16.00	1.00	0.13	E			16	16	0.13	24	0.21	0.24		0.24	0.99					0.99
SUMINISTRO UMAE-10	16.00	16.00	1.00	0.95	E			16	16	0.95	24	1.54	1.74		1.74	7.24					7.24
SUMINISTRO UMAE-10	12.00	14.00	1.00	0.93	E			12	14	0.93	24	1.23	1.42		1.42	5.76					5.76
SUMINISTRO UMAE-10	12.00	14.00	1.00	0.96	E			12	14	0.96	24	1.27	1.46		1.46	5.95					5.95
SUMINISTRO UMAE-10	16.00	16.00	1.00	28.77	E			16	16	28.77	24	46.77	52.61		52.61	219.34					219.34
SUMINISTRO UMAE-10	12.00	14.00	1.00	1.18	E			12	14	1.18	24	1.56	1.80		1.80	7.31					7.31
SUMINISTRO UMAE-10	12.00	14.00	1.00	7.99	E			12	14	7.99	24	10.55	12.18		12.18	49.49					49.49
SUMINISTRO UMAE-10	12.00	14.00	1.00	1.42	E			12	14	1.42	24	1.88	2.16		2.16	8.80					8.80
SUMINISTRO UMAE-10	12.00	14.00	1.00	0.59	E			12	14	0.59	24	0.78	0.90		0.90	3.65					3.65
SUMINISTRO UMAE-10	12.00	14.00	1.00	0.17	E			12	14	0.17	24	0.22	0.26		0.26	1.05					1.05
SUMINISTRO UMAE-10	12.00	14.00	1.00	0.54	E			12	14	0.54	24	0.71	0.82		0.82	3.35					3.35
SUMINISTRO UMAE-10	12.00	14.00	1.00	0.29	E			12	14	0.29	24	0.38	0.44		0.44	1.80					1.80
SUMINISTRO UMAE-10	16.00	16.00	1.00	1.27	E			16	16	1.27	24	2.06	2.32		2.32	9.68					9.68
SUMINISTRO UMAE-10	16.00	16.00	1.00	0.13	E			16	16	0.13	24	0.21	0.24		0.24	0.99					0.99
SUMINISTRO UMAE-10	16.00	16.00	1.00	1.20	E			16	16	1.20	24	1.95	2.19		2.19	9.15					9.15
SUMINISTRO UMAE-11	12.00	14.00	1.00	0.65	E			12	14	0.65	24	0.86	0.99		0.99	4.03					4.03
SUMINISTRO UMAE-11	12.00	14.00	1.00	8.33	E			12	14	8.33	24	11.00	12.69		12.69	51.60					51.60
SUMINISTRO UMAE-11	12.00	14.00	1.00	1.50	E			12	14	1.50	24	1.98	2.29		2.29	9.29					9.29
SUMINISTRO UMAE-11	12.00	14.00	1.00	0.31	E			12	14	0.31	24	0.41	0.47		0.47	1.92					1.92
SUMINISTRO UMAE-11	12.00	14.00	1.00	0.99	E			12	14	0.99	24	1.31	1.51		1.51	6.13					6.13
SUMINISTRO UMAE-11	12.00	14.00	1.00	1.22	E			12	14	1.22	24	1.61	1.86		1.86	7.56					7.56
SUMINISTRO UMAE-11	12.00	14.00	1.00	1.62	E			12	14	1.62	24	2.14	2.47		2.47	10.04					10.04
SUMINISTRO UMAE-12	14.00	16.00	1.00	0.57	E			14	16	0.57	24	0.87	0.98		0.98	4.07					4.07
SUMINISTRO UMAE-12	14.00	16.00	1.00	3.37	E			14	16	3.37	24	5.14	5.82		5.82	24.09					24.09
SUMINISTRO UMAE-12	10.00	14.00	1.00	0.33	E			10	14	0.33	24	0.40	0.47		0.47	1.89					1.89
SUMINISTRO UMAE-12	14.00	16.00	1.00	8.00	E			14	16	8.00	24	12.19	13.82		13.82	57.18					57.18
SUMINISTRO UMAE-12	10.00	14.00	1.00	1.96	E			10	14	1.96	24	2.39	2.79		2.79	11.21					11.21
SUMINISTRO UMAE-12	10.00	14.00	1.00	6.96	E			10	14	6.96	24	8.49	9.90		9.90	39.80					39.80
SUMINISTRO UMAE-12	10.00	14.00	1.00	0.25	E			10	14	0.25	24	0.30	0.36		0.36	1.43					1.43
SUMINISTRO UMAE-12	10.00	14.00	1.00	1.88	E			10	14	1.88	24	2.29	2.67		2.67	10.75					10.75
SUMINISTRO UMAE-12	14.00	16.00	1.00	0.08	E			14	16	0.08	24	0.12	0.14		0.14	0.57					0.57
SUMINISTRO UMAE-12	14.00	16.00	1.00	0.96	E			14	16	0.96	24	1.46	1.66		1.66	6.86					6.86
SUMINISTRO UMAE-12	14.00	16.00	1.00	0.53	E			14	16	0.53	24	0.81	0.92		0.92	3.79					3.79
SUMINISTRO UMAE-12	14.00	16.00	1.00	1.23	E			14	16	1.23	24	1.87	2.12		2.12	8.79					8.79
SUMINISTRO UMAE-12	14.00	16.00	1.00	1.11	E			14	16	1.11	24	1.69	1.92		1.92	7.93					7.93
SUMINISTRO UMAE-13	10.00	4.00	1.00	4.21	E			10	4	4.21	24	2.99	3.85		3.85	14.04					14.04
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-13	10.00	4.00	1.00	1.00	E			10	4	1.00	24	0.71	0.91		0.91	3.34					3.34
SUMINISTRO UMAE-13	14.00	8.00	1.00	6.09	E			14	8	6.09	24	6.81	8.04		8.04	31.92					31.92
SUMINISTRO UMAE-13	24.00	12.00	1.00	1.71	E			24	12	1.71	24	3.13	3.47		3.47	14.67					14.67
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.97	E			10	4	0.97	24	0.69	0.89		0.89	3.24					3.24
SUMINISTRO UMAE-13	10.00	4.00	1.00	3.85	E			10	4	3.85	24	2.74	3.52		3.52	12.84					12.84
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.88	E			10	4	0.88	24	0.63	0.80		0.80	2.94					2.94
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-13	14.00	6.00	1.00	4.10	E			14	6	4.10	24	4.17	5.00		5.00	19.54					19.54
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	10.00	4.00	1.00	1.81	E			10	4	1.81	24	1.29	1.66		1.66	6.04					6.04
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	10.00	4.00	1.00	2.57	E			10	4	2.57	24	1.83	2.35		2.35	8.57					8.57
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.20	E			9	9	0.20	24	0.18	0.22		0.22	0.86					0.86
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.93	E			10	4	0.93	24	0.66	0.85		0.85	3.10					3.10
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.20	E			9	9	0.20	24	0.18	0.22		0.22	0.86					0.86
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.81	E			10	4	0.81	24	0.58	0.74		0.74	2.70					2.70
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.20	E			9	9	0.20	24	0.18	0.22		0.22	0.86					0.86
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.76	E			10	4	0.76	24	0.54	0.69		0.69	2.54					2.54
SUMINISTRO UMAE-13	10.00	6.00	1.00	0.61	E			10	6	0.61	24	0.50	0.62		0.62	2.33					2.33
SUMINISTRO UMAE-13	18.00	12.00	1.00	10.69	E			18	12	10.69	24	16.29	18.46		18.46	76.41					76.41
SUMINISTRO UMAE-13	18.00	10.00	1.00	9.29	E			18	10	9.29	24	13.21	15.10		15.10	61.97					61.97
SUMINISTRO UMAE-13	32.00	12.00	1.00	14.41	E			32	12	14.41	22	32.21	35.14		35.14	181.02				181.02	
SUMINISTRO UMAE-13	10.00	6.00	1.00	0.64	E			10	6	0.64	24	0.52	0.65		0.65	2.44					2.44
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	22.00	12.00	1.00	10.04	E			22	12	10.04	24	17.34	19.38		19.38	81.33					81.33
SUMINISTRO UMAE-13	10.00	6.00	1.00	1.28	E			10	6	1.28	24	1.04	1.30		1.30	4.88					4.88
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	10.00	6.00	1.00	1.28	E			10	6	1.28	24	1.04	1.30		1.30	4.88					4.88
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	12.00	6.00	1.00	1.22	E			12	6	1.22	24	1.12	1.36		1.36	5.23					5.23
SUMINISTRO UMAE-13	12.00	6.00	1.00	1.22	E			12	6	1.22	24	1.12	1.36		1.36	5.23					5.23
SUMINISTRO UMAE-13	24.00	12.00	1.00	3.30	E			24	12	3.30	24	6.04	6.71		6.71	28.30					28.30
SUMINISTRO UMAE-13	10.00	6.00	1.00	2.19	E			10	6	2.19	24	1.78	2.23		2.23	8.35					8.35
SUMINISTRO UMAE-13	26.00	14.00	1.00	8.29	E			26	14	8.29	24	16.85	18.53		18.53	79.00					79.00
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.36	E			9	9	0.36	24	0.33	0.40		0.40	1.54					1.54
SUMINISTRO UMAE-13	10.00	6.00	1.00	2.21	E			10	6	2.21	24	1.80	2.25		2.25	8.42					8.42
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	10.00	6.00	1.00	2.21	E			10	6	2.21	24	1.80	2.25		2.25	8.42					8.42
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	10.00	4.00	1.00	1.03	E			10	4	1.03	24	0.73	0.94		0.94	3.44					3.44
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-13	10.00	4.00	1.00	1.01	E			10	4	1.01	24	0.72	0.92		0.92	3.37					3.37
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-13	10.00	6.00	1.00	1.38	E			10	6	1.38	24	1.12	1.40		1.40	5.26					5.26
SUMINISTRO UMAE-13	16.00	6.00	1.00	5.52	E			16	6	5.52	24	6.17	7.29		7.29	28.93					28.93
SUMINISTRO UMAE-13	10.00	6.00	1.00	1.36	E			10	6	1.36	24	1.11	1.38		1.38	5.18					5.18
SUMINISTRO UMAE-13	24.00	8.00	1.00	5.23	E			24	8	5.23	24	8.50	9.56		9.56	39.87					39.87
SUMINISTRO UMAE-13	10.00	6.00	1.00	1.44	E			10	6	1.44	24	1.17	1.46		1.46	5.49					5.49
SUMINISTRO UMAE-13	10.00	6.00	1.00	1.42	E			10	6	1.42	24	1.15	1.44		1.44	5.41					5.41
SUMINISTRO UMAE-13	10.00	4.00	1.00	1.10	E			10	4	1.10	24	0.78	1.01		1.01	3.67					3.67
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-13	12.00	6.00	1.00	3.89	E			12	6	3.89	24	3.56	4.35		4.35	16.68					16.68
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	24.00	12.00	1.00	6.87	E			24	12	6.87	24	12.56	13.96		13.96	58.92					58.92
SUMINISTRO UMAE-13	10.00	6.00	1.00	1.20	E			10	6	1.20	24	0.98	1.22		1.22	4.57					4.57
SUMINISTRO UMAE-13	10.00	6.00	1.00	2.59	E			10	6	2.59	24	2.11	2.63		2.63	9.87					9.87
SUMINISTRO UMAE-13	10.00	6.00	1.00	2.59	E			10	6	2.59	24	2.11	2.63		2.63	9.87					9.87
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	26.00	14.00	1.00	1.12	E			26	14	1.12	24	2.28	2.50		2.50	10.67					10.67
SUMINISTRO UMAE-13	12.00	6.00	1.00	3.51	E			12	6	3.51	24	3.21	3.92		3.92	15.05					15.05
SUMINISTRO UMAE-13	12.00	6.00	1.00	5.18	E			12	6	5.18	24	4.74	5.79		5.79	22.21					22.21
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	10.00	4.00	1.00	8.09	E			10	4	8.09	24	5.75	7.40		7.40	26.98					26.98

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-13	12.00	6.00	1.00	1.01		E		12	6	1.01	24	0.92	1.13		1.13	4.33					4.33
SUMINISTRO UMAE-13	12.00	12.00	1.00	0.40		E		12	12	0.40	24	0.49	0.57		0.57	2.29					2.29
SUMINISTRO UMAE-13	12.00	6.00	1.00	1.01		E		12	6	1.01	24	0.92	1.13		1.13	4.33					4.33
SUMINISTRO UMAE-13	12.00	12.00	1.00	0.40		E		12	12	0.40	24	0.49	0.57		0.57	2.29					2.29
SUMINISTRO UMAE-13	30.00	14.00	1.00	7.16		E		30	14	7.16	24	16.00	17.46		17.46	75.06					75.06
SUMINISTRO UMAE-13	26.00	14.00	1.00	1.31		E		26	14	1.31	24	2.66	2.93		2.93	12.48					12.48
SUMINISTRO UMAE-13	12.00	6.00	1.00	0.78		E		12	6	0.78	24	0.71	0.87		0.87	3.35					3.35
SUMINISTRO UMAE-13	12.00	12.00	1.00	0.40		E		12	12	0.40	24	0.49	0.57		0.57	2.29					2.29
SUMINISTRO UMAE-13	34.00	14.00	1.00	4.66		E		34	14	4.66	22	11.36	12.31		12.31	63.86			63.86		
SUMINISTRO UMAE-13	12.00	6.00	1.00	0.58		E		12	6	0.58	24	0.53	0.65		0.65	2.49					2.49
SUMINISTRO UMAE-13	12.00	12.00	1.00	0.40		E		12	12	0.40	24	0.49	0.57		0.57	2.29					2.29
SUMINISTRO UMAE-13	12.00	6.00	1.00	0.73		E		12	6	0.73	24	0.67	0.82		0.82	3.13					3.13
SUMINISTRO UMAE-13	12.00	6.00	1.00	0.04		E		12	6	0.04	24	0.04	0.04		0.04	0.17					0.17
SUMINISTRO UMAE-13	12.00	12.00	1.00	0.40		E		12	12	0.40	24	0.49	0.57		0.57	2.29					2.29
SUMINISTRO UMAE-13	10.00	4.00	1.00	5.10		E		10	4	5.10	24	3.63	4.66		4.66	17.01					17.01
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43		E		9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43		E		9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43		E		9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43		E		9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.45		E		9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43		E		9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	14.00	6.00	1.00	0.76		E		14	6	0.76	24	0.77	0.93		0.93	3.62					3.62
SUMINISTRO UMAE-13	12.00	12.00	1.00	0.40		E		12	12	0.40	24	0.49	0.57		0.57	2.29					2.29
SUMINISTRO UMAE-13	12.00	12.00	1.00	0.40		E		12	12	0.40	24	0.49	0.57		0.57	2.29					2.29
SUMINISTRO UMAE-13	12.00	12.00	1.00	0.40		E		12	12	0.40	24	0.49	0.57		0.57	2.29					2.29
SUMINISTRO UMAE-13	10.00	6.00	1.00	1.42		E		10	6	1.42	24	1.15	1.44		1.44	5.41					5.41
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43		E		9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	10.00	4.00	1.00	1.83		E		10	4	1.83	24	1.30	1.67		1.67	6.10					6.10
SUMINISTRO UMAE-13	10.00	4.00	1.00	1.06		E		10	4	1.06	24	0.75	0.97		0.97	3.54					3.54
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.45		E		9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-13	10.00	4.00	1.00	3.41		E		10	4	3.41	24	2.43	3.12		3.12	11.37					11.37
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.28		E		10	4	0.28	24	0.20	0.26		0.26	0.93					0.93
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.45		E		9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.45		E		9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-13	16.00	50.00	1.00	3.10		E		16	50	3.10	22	10.39	11.02		11.02	58.41			58.41		
SUMINISTRO UMAE-13	50.00	16.00	1.00	9.37		E		50	16	9.37	22	31.42	33.32		33.32	176.56			176.56		
SUMINISTRO UMAE-13	50.00	16.00	1.00	1.06		E		50	16	1.06	22	3.55	3.77		3.77	19.97			19.97		
SUMINISTRO UMAE-13	10.00	6.00	1.00	0.95		E		10	6	0.95	24	0.77	0.97		0.97	3.62					3.62
SUMINISTRO UMAE-13	10.00	6.00	1.00	1.01		E		10	6	1.01	24	0.82	1.03		1.03	3.85					3.85
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.43		E		9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.05		E		10	4	0.05	24	0.04	0.05		0.05	0.17					0.17
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.68		E		10	4	0.68	24	0.48	0.62		0.62	2.27					2.27
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.27		E		10	4	0.27	24	0.19	0.25		0.25	0.90					0.90
SUMINISTRO UMAE-13	10.00	4.00	1.00	5.18		E		10	4	5.18	24	3.68	4.74		4.74	17.28					17.28
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.27		E		10	4	0.27	24	0.19	0.25		0.25	0.90					0.90
SUMINISTRO UMAE-13	10.00	4.00	1.00	1.15		E		10	4	1.15	24	0.82	1.05		1.05	3.84					3.84
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.71		E		10	4	0.71	24	0.50	0.65		0.65	2.37					2.37
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.38		E		10	4	0.38	24	0.27	0.35		0.35	1.27					1.27
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.38		E		10	4	0.38	24	0.27	0.35		0.35	1.27					1.27
SUMINISTRO UMAE-13	16.00	50.00	1.00	0.33		E		16	50	0.33	22	1.11	1.17		1.17	6.22			6.22		
SUMINISTRO UMAE-13	50.00	16.00	1.00	1.40		E		50	16	1.40	22	4.69	4.98		4.98	26.38			26.38		
SUMINISTRO UMAE-13	16.00	50.00	1.00	0.37		E		16	50	0.37	22	1.24	1.32		1.32	6.97			6.97		
SUMINISTRO UMAE-13	10.00	6.00	1.00	0.82		E		10	6	0.82	24	0.67	0.83		0.83	3.13					3.13
SUMINISTRO UMAE-13	10.00	6.00	1.00	2.72		E		10	6	2.72	24	2.21	2.76		2.76	10.37					10.37
SUMINISTRO UMAE-13	10.00	6.00	1.00	0.17		E		10	6	0.17	24	0.14	0.17		0.17	0.65					0.65
SUMINISTRO UMAE-13	10.00	6.00	1.00	0.17		E		10	6	0.17	24	0.14	0.17		0.17	0.65					0.65
SUMINISTRO UMAE-14	14.00	10.00	1.00	1.06		E		14	10	1.06	24	1.29	1.51		1.51	6.06					6.06
SUMINISTRO UMAE-14	12.00	12.00	1.00	0.48		E		12	12	0.48	24	0.59	0.68		0.68	2.74					2.74
SUMINISTRO UMAE-14	12.00	6.00	1.00	3.41		E		12	6	3.41	24	3.12	3.81		3.81	14.62					14.62

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-14	12.00	12.00	1.00	0.43		E		12	12	0.43	24	0.52	0.61		0.61	2.46					2.46
SUMINISTRO UMAE-14	16.00	10.00	1.00	9.90		E		16	10	9.90	24	13.08	15.09		15.09	61.33					61.33
SUMINISTRO UMAE-14	16.00	8.00	1.00	1.39		E		16	8	1.39	24	1.69	1.98		1.98	7.95					7.95
SUMINISTRO UMAE-14	10.00	4.00	1.00	0.40		E		10	4	0.40	24	0.28	0.37		0.37	1.33					1.33
SUMINISTRO UMAE-14	12.00	12.00	1.00	0.43		E		12	12	0.43	24	0.52	0.61		0.61	2.46					2.46
SUMINISTRO UMAE-14	12.00	6.00	1.00	4.20		E		12	6	4.20	24	3.84	4.69		4.69	18.01					18.01
SUMINISTRO UMAE-14	12.00	12.00	1.00	0.40		E		12	12	0.40	24	0.49	0.57		0.57	2.29					2.29
SUMINISTRO UMAE-14	10.00	4.00	1.00	3.04		E		10	4	3.04	24	2.16	2.78		2.78	10.14					10.14
SUMINISTRO UMAE-14	9.00	9.00	1.00	0.53		E		9	9	0.53	24	0.48	0.59		0.59	2.27					2.27
SUMINISTRO UMAE-14	10.00	4.00	1.00	1.26		E		10	4	1.26	24	0.90	1.15		1.15	4.20					4.20
SUMINISTRO UMAE-14	10.00	4.00	1.00	6.71		E		10	4	6.71	24	4.77	6.14		6.14	22.38					22.38
SUMINISTRO UMAE-14	10.00	4.00	1.00	0.04		E		10	4	0.04	24	0.03	0.04		0.04	0.13					0.13
SUMINISTRO UMAE-14	9.00	9.00	1.00	0.53		E		9	9	0.53	24	0.48	0.59		0.59	2.27					2.27
SUMINISTRO UMAE-14	16.00	10.00	1.00	5.07		E		16	10	5.07	24	6.70	7.73		7.73	31.41					31.41
SUMINISTRO UMAE-14	16.00	10.00	1.00	1.55		E		16	10	1.55	24	2.05	2.36		2.36	9.60					9.60
SUMINISTRO UMAE-14	28.00	10.00	1.00	3.09		E		28	10	3.09	24	5.96	6.59		6.59	27.98					27.98
SUMINISTRO UMAE-14	28.00	10.00	1.00	2.92		E		28	10	2.92	24	5.64	6.23		6.23	26.44					26.44
SUMINISTRO UMAE-14	10.00	28.00	1.00	1.73		E		10	28	1.73	24	3.34	3.69		3.69	15.66					15.66
SUMINISTRO UMAE-14	28.00	10.00	1.00	4.22		E		28	10	4.22	24	8.15	9.00		9.00	38.21					38.21
SUMINISTRO UMAE-14	10.00	28.00	1.00	1.14		E		10	28	1.14	24	2.20	2.43		2.43	10.32					10.32
SUMINISTRO UMAE-16	18.00	12.00	1.00	3.38		E		18	12	3.38	24	5.15	5.84		5.84	24.16					24.16
SUMINISTRO UMAE-16	30.00	16.00	1.00	5.56		E		30	16	5.56	24	12.99	14.12		14.12	60.94					60.94
SUMINISTRO UMAE-16	10.00	4.00	1.00	1.29		E		10	4	1.29	24	0.92	1.18		1.18	4.30					4.30
SUMINISTRO UMAE-16	10.00	6.00	1.00	1.74		E		10	6	1.74	24	1.41	1.77		1.77	6.63					6.63
SUMINISTRO UMAE-16	10.00	8.00	1.00	7.47		E		10	8	7.47	24	6.83	8.35		8.35	32.04					32.04
SUMINISTRO UMAE-16	12.00	6.00	1.00	1.76		E		12	6	1.76	24	1.61	1.97		1.97	7.55					7.55
SUMINISTRO UMAE-16	10.00	6.00	1.00	1.66		E		10	6	1.66	24	1.35	1.69		1.69	6.33					6.33
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.38		E		9	9	0.38	24	0.35	0.42		0.42	1.63					1.63
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.38		E		9	9	0.38	24	0.35	0.42		0.42	1.63					1.63
SUMINISTRO UMAE-16	16.00	8.00	1.00	1.23		E		16	8	1.23	24	1.50	1.75		1.75	7.03					7.03
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.40		E		9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-16	16.00	10.00	1.00	3.90		E		16	10	3.90	24	5.15	5.94		5.94	24.16					24.16
SUMINISTRO UMAE-16	10.00	4.00	1.00	1.23		E		10	4	1.23	24	0.87	1.12		1.12	4.10					4.10
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.40		E		9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-16	10.00	4.00	1.00	1.21		E		10	4	1.21	24	0.86	1.11		1.11	4.04					4.04
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.40		E		9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-16	10.00	4.00	1.00	1.21		E		10	4	1.21	24	0.86	1.11		1.11	4.04					4.04
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.40		E		9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-16	12.00	6.00	1.00	1.68		E		12	6	1.68	24	1.54	1.88		1.88	7.20					7.20
SUMINISTRO UMAE-16	24.00	6.00	1.00	3.08		E		24	6	3.08	24	4.69	5.32		5.32	22.01					22.01
SUMINISTRO UMAE-16	12.00	6.00	1.00	1.72		E		12	6	1.72	24	1.57	1.92		1.92	7.38					7.38
SUMINISTRO UMAE-16	12.00	12.00	1.00	0.35		E		12	12	0.35	24	0.43	0.50		0.50	2.00					2.00
SUMINISTRO UMAE-16	12.00	12.00	1.00	0.35		E		12	12	0.35	24	0.43	0.50		0.50	2.00					2.00
SUMINISTRO UMAE-16	12.00	6.00	1.00	1.76		E		12	6	1.76	24	1.61	1.97		1.97	7.55					7.55
SUMINISTRO UMAE-16	18.00	6.00	1.00	2.66		E		18	6	2.66	24	3.24	3.78		3.78	15.21					15.21
SUMINISTRO UMAE-16	12.00	6.00	1.00	1.79		E		12	6	1.79	24	1.64	2.00		2.00	7.68					7.68
SUMINISTRO UMAE-16	12.00	12.00	1.00	0.35		E		12	12	0.35	24	0.43	0.50		0.50	2.00					2.00
SUMINISTRO UMAE-16	12.00	12.00	1.00	0.35		E		12	12	0.35	24	0.43	0.50		0.50	2.00					2.00
SUMINISTRO UMAE-16	28.00	12.00	1.00	2.35		E		28	12	2.35	24	4.78	5.25		5.25	22.40					22.40
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.67		E		10	4	0.67	24	0.48	0.61		0.61	2.23					2.23
SUMINISTRO UMAE-16	12.00	10.00	1.00	1.88		E		12	10	1.88	24	2.10	2.48		2.48	9.85					9.85
SUMINISTRO UMAE-16	16.00	12.00	1.00	1.88		E		16	12	1.88	24	2.67	3.06		3.06	12.54					12.54
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.40		E		9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.67		E		10	4	0.67	24	0.48	0.61		0.61	2.23					2.23
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.67		E		10	4	0.67	24	0.48	0.61		0.61	2.23					2.23
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.67		E		10	4	0.67	24	0.48	0.61		0.61	2.23					2.23
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.40		E		9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.40		E		9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.40		E		9	9	0.40	24	0.37	0.45		0.45	1.72					1.72

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-16	10.00	4.00	1.00	1.84		E		10	4	1.84	24	1.31	1.68		1.68	6.14					6.14
SUMINISTRO UMAE-16	12.00	8.00	1.00	2.20		E		12	8	2.20	24	2.24	2.68		2.68	10.48					10.48
SUMINISTRO UMAE-16	12.00	10.00	1.00	0.52		E		12	10	0.52	24	0.58	0.69		0.69	2.73					2.73
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.40		E		9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-16	10.00	4.00	1.00	1.26		E		10	4	1.26	24	0.90	1.15		1.15	4.20					4.20
SUMINISTRO UMAE-16	10.00	4.00	1.00	1.25		E		10	4	1.25	24	0.89	1.14		1.14	4.17					4.17
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.40		E		9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.40		E		9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-16	14.00	12.00	1.00	4.45		E		14	12	4.45	24	5.88	6.78		6.78	27.57					27.57
SUMINISTRO UMAE-16	12.00	4.00	1.00	1.30		E		12	4	1.30	24	1.06	1.32		1.32	4.96					4.96
SUMINISTRO UMAE-16	12.00	4.00	1.00	1.69		E		12	4	1.69	24	1.37	1.72		1.72	6.44					6.44
SUMINISTRO UMAE-16	10.00	4.00	1.00	2.32		E		10	4	2.32	24	1.65	2.12		2.12	7.74					7.74
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.40		E		9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-16	12.00	6.00	1.00	1.80		E		12	6	1.80	24	1.65	2.01		2.01	7.72					7.72
SUMINISTRO UMAE-16	28.00	16.00	1.00	7.08		E		28	16	7.08	24	15.83	17.26		17.26	74.22					74.22
SUMINISTRO UMAE-16	12.00	12.00	1.00	0.35		E		12	12	0.35	24	0.43	0.50		0.50	2.00					2.00
SUMINISTRO UMAE-16	12.00	12.00	1.00	0.38		E		12	12	0.38	24	0.46	0.54		0.54	2.17					2.17
SUMINISTRO UMAE-16	12.00	12.00	1.00	0.35		E		12	12	0.35	24	0.43	0.50		0.50	2.00					2.00
SUMINISTRO UMAE-16	10.00	4.00	1.00	1.91		E		10	4	1.91	24	1.36	1.75		1.75	6.37					6.37
SUMINISTRO UMAE-16	10.00	4.00	1.00	3.06		E		10	4	3.06	24	2.18	2.80		2.80	10.21					10.21
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.51		E		10	4	0.51	24	0.36	0.47		0.47	1.70					1.70
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.40		E		9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.41		E		10	4	0.41	24	0.29	0.37		0.37	1.37					1.37
SUMINISTRO UMAE-16	10.00	4.00	1.00	1.26		E		10	4	1.26	24	0.90	1.15		1.15	4.20					4.20
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.40		E		9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-16	12.00	6.00	1.00	2.28		E		12	6	2.28	24	2.08	2.55		2.55	9.78					9.78
SUMINISTRO UMAE-16	10.00	4.00	1.00	2.12		E		10	4	2.12	24	1.51	1.94		1.94	7.07					7.07
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.32		E		10	4	0.32	24	0.23	0.29		0.29	1.07					1.07
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.40		E		9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-16	30.00	16.00	1.00	8.43		E		30	16	8.43	24	19.70	21.41		21.41	92.39					92.39
SUMINISTRO UMAE-16	30.00	16.00	1.00	1.80		E		30	16	1.80	24	4.21	4.57		4.57	19.73					19.73
SUMINISTRO UMAE-16	30.00	16.00	1.00	3.81		E		30	16	3.81	24	8.90	9.68		9.68	41.76					41.76
SUMINISTRO UMAE-16	30.00	16.00	1.00	1.66		E		30	16	1.66	24	3.88	4.22		4.22	18.19					18.19
SUMINISTRO UMAE-16	30.00	16.00	1.00	0.39		E		30	16	0.39	24	0.91	0.99		0.99	4.27					4.27
SUMINISTRO UMAE-17	10.00	4.00	1.00	2.63		E		10	4	2.63	24	1.87	2.40		2.40	8.77					8.77
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.22		E		9	9	0.22	24	0.20	0.25		0.25	0.94					0.94
SUMINISTRO UMAE-17	10.00	4.00	1.00	1.34		E		10	4	1.34	24	0.95	1.23		1.23	4.47					4.47
SUMINISTRO UMAE-17	18.00	10.00	1.00	2.59		E		18	10	2.59	24	3.68	4.21		4.21	17.28					17.28
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.17		E		9	9	0.17	24	0.16	0.19		0.19	0.73					0.73
SUMINISTRO UMAE-17	10.00	4.00	1.00	2.57		E		10	4	2.57	24	1.83	2.35		2.35	8.57					8.57
SUMINISTRO UMAE-17	10.00	4.00	1.00	2.55		E		10	4	2.55	24	1.81	2.33		2.33	8.51					8.51
SUMINISTRO UMAE-17	10.00	4.00	1.00	2.55		E		10	4	2.55	24	1.81	2.33		2.33	8.51					8.51
SUMINISTRO UMAE-17	10.00	4.00	1.00	2.52		E		10	4	2.52	24	1.79	2.30		2.30	8.41					8.41
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.22		E		9	9	0.22	24	0.20	0.25		0.25	0.94					0.94
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.22		E		9	9	0.22	24	0.20	0.25		0.25	0.94					0.94
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.22		E		9	9	0.22	24	0.20	0.25		0.25	0.94					0.94
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.22		E		9	9	0.22	24	0.20	0.25		0.25	0.94					0.94
SUMINISTRO UMAE-17	32.00	14.00	1.00	28.66		E		32	14	28.66	22	66.97	72.80		72.80	376.39				376.39	
SUMINISTRO UMAE-17	10.00	6.00	1.00	3.20		E		10	6	3.20	24	2.60	3.25		3.25	12.20					12.20
SUMINISTRO UMAE-17	14.00	8.00	1.00	3.31		E		14	8	3.31	24	3.70	4.37		4.37	17.35					17.35
SUMINISTRO UMAE-17	16.00	8.00	1.00	8.12		E		16	8	8.12	24	9.90	11.55		11.55	46.43					46.43
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.26		E		9	9	0.26	24	0.24	0.29		0.29	1.12					1.12
SUMINISTRO UMAE-17	12.00	6.00	1.00	4.90		E		12	6	4.90	24	4.48	5.48		5.48	21.01					21.01
SUMINISTRO UMAE-17	10.00	6.00	1.00	1.84		E		10	6	1.84	24	1.50	1.87		1.87	7.01					7.01
SUMINISTRO UMAE-17	10.00	6.00	1.00	1.85		E		10	6	1.85	24	1.50	1.88		1.88	7.05					7.05
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.20		E		9	9	0.20	24	0.18	0.22		0.22	0.86					0.86
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.20		E		9	9	0.20	24	0.18	0.22		0.22	0.86					0.86
SUMINISTRO UMAE-17	10.00	6.00	1.00	2.00		E		10	6	2.00	24	1.63	2.03		2.03	7.62					7.62
SUMINISTRO UMAE-17	10.00	6.00	1.00	2.01		E		10	6	2.01	24	1.63	2.04		2.04	7.66					7.66

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.20	E			9	9	0.20	24	0.18	0.22		0.22	0.86					0.86
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.20	E			9	9	0.20	24	0.18	0.22		0.22	0.86					0.86
SUMINISTRO UMAE-17	12.00	10.00	1.00	5.66	E			12	10	5.66	24	6.33	7.48		7.48	29.67					29.67
SUMINISTRO UMAE-17	10.00	6.00	1.00	1.95	E			10	6	1.95	24	1.58	1.98		1.98	7.43					7.43
SUMINISTRO UMAE-17	10.00	6.00	1.00	1.96	E			10	6	1.96	24	1.59	1.99		1.99	7.47					7.47
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.20	E			9	9	0.20	24	0.18	0.22		0.22	0.86					0.86
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.20	E			9	9	0.20	24	0.18	0.22		0.22	0.86					0.86
SUMINISTRO UMAE-17	16.00	10.00	1.00	1.30	E			16	10	1.30	24	1.72	1.98		1.98	8.05					8.05
SUMINISTRO UMAE-17	10.00	4.00	1.00	2.40	E			10	4	2.40	24	1.71	2.19		2.19	8.01					8.01
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.30	E			9	9	0.30	24	0.27	0.34		0.34	1.29					1.29
SUMINISTRO UMAE-17	18.00	10.00	1.00	2.71	E			18	10	2.71	24	3.85	4.41		4.41	18.08					18.08
SUMINISTRO UMAE-17	10.00	4.00	1.00	2.65	E			10	4	2.65	24	1.88	2.42		2.42	8.84					8.84
SUMINISTRO UMAE-17	10.00	6.00	1.00	0.70	E			10	6	0.70	24	0.57	0.71		0.71	2.67					2.67
SUMINISTRO UMAE-17	12.00	6.00	1.00	1.70	E			12	6	1.70	24	1.55	1.90		1.90	7.29					7.29
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.20	E			9	9	0.20	24	0.18	0.22		0.22	0.86					0.86
SUMINISTRO UMAE-17	12.00	6.00	1.00	1.69	E			12	6	1.69	24	1.55	1.89		1.89	7.25					7.25
SUMINISTRO UMAE-17	12.00	12.00	1.00	0.17	E			12	12	0.17	24	0.21	0.24		0.24	0.97					0.97
SUMINISTRO UMAE-17	16.00	10.00	1.00	7.31	E			16	10	7.31	24	9.66	11.14		11.14	45.28					45.28
SUMINISTRO UMAE-17	10.00	4.00	1.00	2.83	E			10	4	2.83	24	2.01	2.59		2.59	9.44					9.44
SUMINISTRO UMAE-17	10.00	4.00	1.00	2.83	E			10	4	2.83	24	2.01	2.59		2.59	9.44					9.44
SUMINISTRO UMAE-17	10.00	4.00	1.00	2.49	E			10	4	2.49	24	1.77	2.28		2.28	8.31					8.31
SUMINISTRO UMAE-17	10.00	4.00	1.00	1.35	E			10	4	1.35	24	0.96	1.23		1.23	4.50					4.50
SUMINISTRO UMAE-17	10.00	4.00	1.00	1.35	E			10	4	1.35	24	0.96	1.23		1.23	4.50					4.50
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.22	E			9	9	0.22	24	0.20	0.25		0.25	0.94					0.94
SUMINISTRO UMAE-17	20.00	10.00	1.00	8.36	E			20	10	8.36	24	12.74	14.44		14.44	59.75					59.75
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.22	E			9	9	0.22	24	0.20	0.25		0.25	0.94					0.94
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.22	E			9	9	0.22	24	0.20	0.25		0.25	0.94					0.94
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.22	E			9	9	0.22	24	0.20	0.25		0.25	0.94					0.94
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.22	E			9	9	0.22	24	0.20	0.25		0.25	0.94					0.94
SUMINISTRO UMAE-17	28.00	12.00	1.00	2.86	E			28	12	2.86	24	5.81	6.39		6.39	27.26					27.26
SUMINISTRO UMAE-17	10.00	4.00	1.00	1.77	E			10	4	1.77	24	1.26	1.62		1.62	5.90					5.90
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.30	E			9	9	0.30	24	0.27	0.34		0.34	1.29					1.29
SUMINISTRO UMAE-17	10.00	4.00	1.00	0.51	E			10	4	0.51	24	0.36	0.47		0.47	1.70					1.70
SUMINISTRO UMAE-17	9.00	9.00	1.00	0.22	E			9	9	0.22	24	0.20	0.25		0.25	0.94					0.94
SUMINISTRO UMAE-17	10.00	4.00	1.00	0.17	E			10	4	0.17	24	0.12	0.16		0.16	0.57					0.57
SUMINISTRO UMAE-17	10.00	4.00	1.00	1.78	E			10	4	1.78	24	1.27	1.63		1.63	5.94					5.94
SUMINISTRO UMAE-17	10.00	4.00	1.00	2.03	E			10	4	2.03	24	1.44	1.86		1.86	6.77					6.77
SUMINISTRO UMAE-17	32.00	14.00	1.00	5.22	E			32	14	5.22	22	12.20	13.26		13.26	68.55				68.55	
SUMINISTRO UMAE-17	32.00	14.00	1.00	4.87	E			32	14	4.87	22	11.38	12.37		12.37	63.96				63.96	
SUMINISTRO UMAE-17	32.00	14.00	1.00	1.84	E			32	14	1.84	22	4.30	4.67		4.67	24.16					24.16
SUMINISTRO UMAE-17	10.00	4.00	1.00	2.53	E			10	4	2.53	24	1.80	2.31		2.31	8.44					8.44
SUMINISTRO UMAE-18	10.00	4.00	1.00	1.83	E			10	4	1.83	24	1.30	1.67		1.67	6.10					6.10
SUMINISTRO UMAE-18	18.00	12.00	1.00	2.58	E			18	12	2.58	24	3.93	4.46		4.46	18.44					18.44
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-18	10.00	4.00	1.00	1.85	E			10	4	1.85	24	1.32	1.69		1.69	6.17					6.17
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.40	E			9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-18	10.00	4.00	1.00	1.47	E			10	4	1.47	24	1.05	1.34		1.34	4.90					4.90
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.40	E			9	9	0.40	24	0.37	0.45		0.45	1.72					1.72
SUMINISTRO UMAE-18	10.00	4.00	1.00	1.32	E			10	4	1.32	24	0.94	1.21		1.21	4.40					4.40
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.32	E			9	9	0.32	24	0.29	0.36		0.36	1.37					1.37
SUMINISTRO UMAE-18	10.00	4.00	1.00	1.32	E			10	4	1.32	24	0.94	1.21		1.21	4.40					4.40
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.32	E			9	9	0.32	24	0.29	0.36		0.36	1.37					1.37
SUMINISTRO UMAE-18	10.00	4.00	1.00	0.55	E			10	4	0.55	24	0.39	0.50		0.50	1.83					1.83
SUMINISTRO UMAE-18	10.00	4.00	1.00	1.91	E			10	4	1.91	24	1.36	1.75		1.75	6.37					6.37
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.30	E			9	9	0.30	24	0.27	0.34		0.34	1.29					1.29
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.27	E			9	9	0.27	24	0.25	0.30		0.30	1.16					1.16
SUMINISTRO UMAE-18	10.00	4.00	1.00	1.25	E			10	4	1.25	24	0.89	1.14		1.14	4.17					4.17
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.30	E			9	9	0.30	24	0.27	0.34		0.34	1.29					1.29
SUMINISTRO UMAE-18	10.00	4.00	1.00	0.32	E			10	4	0.32	24	0.23	0.29		0.29	1.07					1.07

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.25		E		9	9	0.25	24	0.23	0.28		0.28	1.07					1.07
SUMINISTRO UMAE-18	10.00	4.00	1.00	2.18		E		10	4	2.18	24	1.55	1.99		1.99	7.27					7.27
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.27		E		9	9	0.27	24	0.25	0.30		0.30	1.16					1.16
SUMINISTRO UMAE-18	10.00	4.00	1.00	3.08		E		10	4	3.08	24	2.19	2.82		2.82	10.27					10.27
SUMINISTRO UMAE-18	10.00	6.00	1.00	3.33		E		10	6	3.33	24	2.71	3.38		3.38	12.69					12.69
SUMINISTRO UMAE-18	10.00	8.00	1.00	12.84		E		10	8	12.84	24	11.74	14.35		14.35	55.06					55.06
SUMINISTRO UMAE-18	12.00	10.00	1.00	6.76		E		12	10	6.76	24	7.55	8.93		8.93	35.43					35.43
SUMINISTRO UMAE-18	16.00	10.00	1.00	4.50		E		16	10	4.50	24	5.94	6.86		6.86	27.88					27.88
SUMINISTRO UMAE-18	18.00	10.00	1.00	2.90		E		18	10	2.90	24	4.12	4.71		4.71	19.35					19.35
SUMINISTRO UMAE-18	10.00	6.00	1.00	0.52		E		10	6	0.52	24	0.42	0.53		0.53	1.98					1.98
SUMINISTRO UMAE-18	10.00	6.00	1.00	1.24		E		10	6	1.24	24	1.01	1.26		1.26	4.73					4.73
SUMINISTRO UMAE-18	18.00	12.00	1.00	0.34		E		18	12	0.34	24	0.52	0.59		0.59	2.43					2.43
SUMINISTRO UMAE-18	18.00	12.00	1.00	6.22		E		18	12	6.22	24	9.48	10.74		10.74	44.46					44.46
SUMINISTRO UMAE-18	18.00	12.00	1.00	0.15		E		18	12	0.15	24	0.23	0.26		0.26	1.07					1.07
SUMINISTRO UMAE-18	18.00	12.00	1.00	1.77		E		18	12	1.77	24	2.70	3.06		3.06	12.65					12.65
SUMINISTRO UMAE-18	10.00	4.00	1.00	1.41		E		10	4	1.41	24	1.00	1.29		1.29	4.70					4.70
SUMINISTRO UMAE-18	10.00	4.00	1.00	1.41		E		10	4	1.41	24	1.00	1.29		1.29	4.70					4.70
SUMINISTRO UMAE-18	10.00	6.00	1.00	0.98		E		10	6	0.98	24	0.80	1.00		1.00	3.74					3.74
SUMINISTRO UMAE-18	10.00	6.00	1.00	0.09		E		10	6	0.09	24	0.07	0.09		0.09	0.34					0.34
SUMINISTRO UMAE-18	10.00	4.00	1.00	0.20		E		10	4	0.20	24	0.14	0.18		0.18	0.67					0.67
SUMINISTRO UMAE-18	10.00	4.00	1.00	0.20		E		10	4	0.20	24	0.14	0.18		0.18	0.67					0.67
SUMINISTRO UMAE-18	10.00	6.00	1.00	1.40		E		10	6	1.40	24	1.14	1.42		1.42	5.34					5.34
SUMINISTRO UMAE-18	10.00	4.00	1.00	1.45		E		10	4	1.45	24	1.03	1.33		1.33	4.84					4.84
SUMINISTRO UMAE-18	10.00	6.00	1.00	0.13		E		10	6	0.13	24	0.11	0.13		0.13	0.50					0.50
SUMINISTRO UMAE-18	10.00	4.00	1.00	0.13		E		10	4	0.13	24	0.09	0.12		0.12	0.43					0.43
SUMINISTRO UMAE-18	18.00	12.00	1.00	0.22		E		18	12	0.22	24	0.34	0.38		0.38	1.57					1.57
SUMINISTRO UMAE-18	18.00	12.00	1.00	0.61		E		18	12	0.61	24	0.93	1.05		1.05	4.36					4.36
SUMINISTRO UMAE-20	32.00	18.00	1.00	1.50		E		32	18	1.50	22	3.81	4.11		4.11	21.41				21.41	
SUMINISTRO UMAE-20	32.00	18.00	1.00	0.50		E		32	18	0.50	22	1.27	1.37		1.37	7.14					
SUMINISTRO UMAE-20	32.00	18.00	1.00	2.59		E		32	18	2.59	22	6.58	7.10		7.10	36.97				36.97	
SUMINISTRO UMAE-20	20.00	10.00	1.00	2.95		E		20	10	2.95	24	4.50	5.10		5.10	21.09					21.09
SUMINISTRO UMAE-20	12.00	6.00	1.00	3.01		E		12	6	3.01	24	2.75	3.36		3.36	12.91					12.91
SUMINISTRO UMAE-20	12.00	12.00	1.00	0.40		E		12	12	0.40	24	0.49	0.57		0.57	2.29					2.29
SUMINISTRO UMAE-20	10.00	4.00	1.00	1.57		E		10	4	1.57	24	1.12	1.44		1.44	5.24					5.24
SUMINISTRO UMAE-20	10.00	4.00	1.00	3.74		E		10	4	3.74	24	2.66	3.42		3.42	12.47					12.47
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45		E		9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	10.00	4.00	1.00	1.85		E		10	4	1.85	24	1.32	1.69		1.69	6.17					6.17
SUMINISTRO UMAE-20	10.00	4.00	1.00	1.22		E		10	4	1.22	24	0.87	1.12		1.12	4.07					4.07
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45		E		9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	10.00	4.00	1.00	1.87		E		10	4	1.87	24	1.33	1.71		1.71	6.24					6.24
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45		E		9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	10.00	6.00	1.00	4.32		E		10	6	4.32	24	3.51	4.39		4.39	16.47					16.47
SUMINISTRO UMAE-20	12.00	8.00	1.00	6.66		E		12	8	6.66	24	6.77	8.12		8.12	31.74					31.74
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.69		E		10	4	0.69	24	0.49	0.63		0.63	2.30					2.30
SUMINISTRO UMAE-20	10.00	4.00	1.00	1.45		E		10	4	1.45	24	1.03	1.33		1.33	4.84					4.84
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45		E		9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	12.00	8.00	1.00	15.92		E		12	8	15.92	24	16.17	19.41		19.41	75.86					75.86
SUMINISTRO UMAE-20	12.00	6.00	1.00	8.46		E		12	6	8.46	24	7.74	9.45		9.45	36.28					36.28
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.38		E		10	4	0.38	24	0.27	0.35		0.35	1.27					1.27
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.55		E		10	4	0.55	24	0.39	0.50		0.50	1.83					1.83
SUMINISTRO UMAE-20	12.00	8.00	1.00	2.96		E		12	8	2.96	24	3.01	3.61		3.61	14.10					14.10
SUMINISTRO UMAE-20	10.00	6.00	1.00	2.64		E		10	6	2.64	24	2.15	2.68		2.68	10.06					10.06
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45		E		9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.43		E		9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-20	10.00	4.00	1.00	3.20		E		10	4	3.20	24	2.28	2.93		2.93	10.67					10.67
SUMINISTRO UMAE-20	10.00	4.00	1.00	3.22		E		10	4	3.22	24	2.29	2.94		2.94	10.74					10.74
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45		E		9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.43		E		9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-20	10.00	6.00	1.00	2.64		E		10	6	2.64	24	2.15	2.68		2.68	10.06					10.06

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-20	10.00	4.00	1.00	3.22	E			10	4	3.22	24	2.29	2.94		2.94	10.74					10.74
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-20	10.00	6.00	1.00	2.59	E			10	6	2.59	24	2.11	2.63		2.63	9.87					9.87
SUMINISTRO UMAE-20	10.00	6.00	1.00	1.16	E			10	6	1.16	24	0.94	1.18		1.18	4.42					4.42
SUMINISTRO UMAE-20	12.00	8.00	1.00	5.04	E			12	8	5.04	24	5.12	6.14		6.14	24.02					24.02
SUMINISTRO UMAE-20	20.00	10.00	1.00	8.18	E			20	10	8.18	24	12.47	14.13		14.13	58.47					58.47
SUMINISTRO UMAE-20	20.00	10.00	1.00	16.72	E			20	10	16.72	24	25.48	28.88		28.88	119.51					119.51
SUMINISTRO UMAE-20	10.00	4.00	1.00	1.55	E			10	4	1.55	24	1.10	1.42		1.42	5.17					5.17
SUMINISTRO UMAE-20	10.00	4.00	1.00	5.60	E			10	4	5.60	24	3.98	5.12		5.12	18.68					18.68
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	10.00	4.00	1.00	1.56	E			10	4	1.56	24	1.11	1.43		1.43	5.20					5.20
SUMINISTRO UMAE-20	10.00	4.00	1.00	1.18	E			10	4	1.18	24	0.84	1.08		1.08	3.94					3.94
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	10.00	4.00	1.00	1.59	E			10	4	1.59	24	1.13	1.45		1.45	5.30					5.30
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	10.00	6.00	1.00	4.00	E			10	6	4.00	24	3.25	4.06		4.06	15.25					15.25
SUMINISTRO UMAE-20	16.00	8.00	1.00	10.70	E			16	8	10.70	24	13.05	15.22		15.22	61.18					61.18
SUMINISTRO UMAE-20	10.00	4.00	1.00	1.58	E			10	4	1.58	24	1.12	1.44		1.44	5.27					5.27
SUMINISTRO UMAE-20	10.00	6.00	1.00	1.06	E			10	6	1.06	24	0.86	1.08		1.08	4.04					4.04
SUMINISTRO UMAE-20	10.00	4.00	1.00	1.72	E			10	4	1.72	24	1.22	1.57		1.57	5.74					5.74
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	10.00	4.00	1.00	1.74	E			10	4	1.74	24	1.24	1.59		1.59	5.80					5.80
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	10.00	6.00	1.00	0.84	E			10	6	0.84	24	0.68	0.85		0.85	3.20					3.20
SUMINISTRO UMAE-20	12.00	6.00	1.00	1.99	E			12	6	1.99	24	1.82	2.22		2.22	8.53					8.53
SUMINISTRO UMAE-20	12.00	12.00	1.00	0.40	E			12	12	0.40	24	0.49	0.57		0.57	2.29					2.29
SUMINISTRO UMAE-20	12.00	8.00	1.00	3.32	E			12	8	3.32	24	3.37	4.05		4.05	15.82					15.82
SUMINISTRO UMAE-20	18.00	8.00	1.00	10.41	E			18	8	10.41	24	13.75	15.86		15.86	64.49					64.49
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.54	E			10	4	0.54	24	0.38	0.49		0.49	1.80					1.80
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	24.00	10.00	1.00	3.31	E			24	10	3.31	24	5.72	6.39		6.39	26.81					26.81
SUMINISTRO UMAE-20	10.00	6.00	1.00	4.48	E			10	6	4.48	24	3.64	4.55		4.55	17.08					17.08
SUMINISTRO UMAE-20	10.00	6.00	1.00	2.45	E			10	6	2.45	24	1.99	2.49		2.49	9.34					9.34
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-20	14.00	8.00	1.00	2.48	E			14	8	2.48	24	2.77	3.28		3.28	13.00					13.00
SUMINISTRO UMAE-20	20.00	10.00	1.00	8.73	E			20	10	8.73	24	13.30	15.08		15.08	62.40					62.40
SUMINISTRO UMAE-20	10.00	4.00	1.00	2.60	E			10	4	2.60	24	1.85	2.38		2.38	8.67					8.67
SUMINISTRO UMAE-20	10.00	4.00	1.00	2.60	E			10	4	2.60	24	1.85	2.38		2.38	8.67					8.67
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	10.00	6.00	1.00	1.62	E			10	6	1.62	24	1.32	1.65		1.65	6.18					6.18
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-20	10.00	6.00	1.00	4.80	E			10	6	4.80	24	3.90	4.88		4.88	18.30					18.30
SUMINISTRO UMAE-20	10.00	8.00	1.00	3.58	E			10	8	3.58	24	3.27	4.00		4.00	15.35					15.35
SUMINISTRO UMAE-20	12.00	6.00	1.00	2.92	E			12	6	2.92	24	2.67	3.26		3.26	12.52					12.52
SUMINISTRO UMAE-20	12.00	12.00	1.00	0.40	E			12	12	0.40	24	0.49	0.57		0.57	2.29					2.29
SUMINISTRO UMAE-20	14.00	8.00	1.00	7.20	E			14	8	7.20	24	8.05	9.51		9.51	37.74					37.74
SUMINISTRO UMAE-20	10.00	4.00	1.00	1.59	E			10	4	1.59	24	1.13	1.45		1.45	5.30					5.30
SUMINISTRO UMAE-20	10.00	4.00	1.00	3.56	E			10	4	3.56	24	2.53	3.26		3.26	11.87					11.87
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	10.00	4.00	1.00	1.68	E			10	4	1.68	24	1.19	1.54		1.54	5.60					5.60
SUMINISTRO UMAE-20	10.00	4.00	1.00	1.10	E			10	4	1.10	24	0.78	1.01		1.01	3.67					3.67
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.50	E			9	9	0.50	24	0.46	0.56		0.56	2.14					2.14
SUMINISTRO UMAE-20	10.00	4.00	1.00	1.70	E			10	4	1.70	24	1.21	1.55		1.55	5.67					5.67
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	10.00	6.00	1.00	4.27	E			10	6	4.27	24	3.47	4.34		4.34	16.28					16.28
SUMINISTRO UMAE-20	14.00	10.00	1.00	5.88	E			14	10	5.88	24	7.17	8.36		8.36	33.62					33.62

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-20	10.00	4.00	1.00	2.21	E			10	4	2.21	24	1.57	2.02		2.02	7.37					7.37
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.18	E			10	4	0.18	24	0.13	0.16		0.16	0.60					0.60
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-20	10.00	6.00	1.00	2.72	E			10	6	2.72	24	2.21	2.76		2.76	10.37					10.37
SUMINISTRO UMAE-20	18.00	10.00	1.00	9.66	E			18	10	9.66	24	13.74	15.70		15.70	64.44					64.44
SUMINISTRO UMAE-20	20.00	10.00	1.00	6.35	E			20	10	6.35	24	9.68	10.97		10.97	45.39					45.39
SUMINISTRO UMAE-20	20.00	10.00	1.00	3.03	E			20	10	3.03	24	4.62	5.23		5.23	21.66					21.66
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.77	E			10	4	0.77	24	0.55	0.70		0.70	2.57					2.57
SUMINISTRO UMAE-20	10.00	4.00	1.00	5.69	E			10	4	5.69	24	4.05	5.20		5.20	18.98					18.98
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.49	E			10	4	0.49	24	0.35	0.45		0.45	1.63					1.63
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.32	E			10	4	0.32	24	0.23	0.29		0.29	1.07					1.07
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	10.00	6.00	1.00	2.64	E			10	6	2.64	24	2.15	2.68		2.68	10.06					10.06
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-20	10.00	4.00	1.00	3.20	E			10	4	3.20	24	2.28	2.93		2.93	10.67					10.67
SUMINISTRO UMAE-20	10.00	4.00	1.00	3.22	E			10	4	3.22	24	2.29	2.94		2.94	10.74					10.74
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-20	10.00	6.00	1.00	2.64	E			10	6	2.64	24	2.15	2.68		2.68	10.06					10.06
SUMINISTRO UMAE-20	10.00	4.00	1.00	3.22	E			10	4	3.22	24	2.29	2.94		2.94	10.74					10.74
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-20	10.00	6.00	1.00	2.59	E			10	6	2.59	24	2.11	2.63		2.63	9.87					9.87
SUMINISTRO UMAE-20	10.00	6.00	1.00	1.16	E			10	6	1.16	24	0.94	1.18		1.18	4.42					4.42
SUMINISTRO UMAE-20	12.00	8.00	1.00	5.04	E			12	8	5.04	24	5.12	6.14		6.14	24.02					24.02
SUMINISTRO UMAE-20	22.00	10.00	1.00	12.03	E			22	10	12.03	24	19.56	22.00		22.00	91.72					91.72
SUMINISTRO UMAE-20	24.00	10.00	1.00	14.42	E			24	10	14.42	24	24.91	27.84		27.84	116.81					116.81
SUMINISTRO UMAE-20	16.00	8.00	1.00	2.20	E			16	8	2.20	24	2.68	3.13		3.13	12.58					12.58
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.49	E			10	4	0.49	24	0.35	0.45		0.45	1.63					1.63
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	12.00	6.00	1.00	2.40	E			12	6	2.40	24	2.19	2.68		2.68	10.29					10.29
SUMINISTRO UMAE-20	12.00	6.00	1.00	6.88	E			12	6	6.88	24	6.29	7.69		7.69	29.51					29.51
SUMINISTRO UMAE-20	12.00	12.00	1.00	0.40	E			12	12	0.40	24	0.49	0.57		0.57	2.29					2.29
SUMINISTRO UMAE-20	10.00	4.00	1.00	1.46	E			10	4	1.46	24	1.04	1.34		1.34	4.87					4.87
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	10.00	4.00	1.00	1.99	E			10	4	1.99	24	1.42	1.82		1.82	6.64					6.64
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	10.00	6.00	1.00	4.38	E			10	6	4.38	24	3.56	4.45		4.45	16.70					16.70
SUMINISTRO UMAE-20	16.00	10.00	1.00	10.91	E			16	10	10.91	24	14.41	16.63		16.63	67.58					67.58
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.74	E			10	4	0.74	24	0.53	0.68		0.68	2.47					2.47
SUMINISTRO UMAE-20	10.00	4.00	1.00	5.80	E			10	4	5.80	24	4.12	5.30		5.30	19.35					19.35
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.49	E			10	4	0.49	24	0.35	0.45		0.45	1.63					1.63
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.45	E			9	9	0.45	24	0.41	0.50		0.50	1.93					1.93
SUMINISTRO UMAE-20	12.00	6.00	1.00	0.61	E			12	6	0.61	24	0.56	0.68		0.68	2.62					2.62
SUMINISTRO UMAE-20	12.00	6.00	1.00	6.35	E			12	6	6.35	24	5.81	7.10		7.10	27.23					27.23
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.43	E			9	9	0.43	24	0.39	0.48		0.48	1.84					1.84
SUMINISTRO UMAE-20	18.00	10.00	1.00	3.80	E			18	10	3.80	24	5.41	6.18		6.18	25.35					25.35
SUMINISTRO UMAE-20	22.00	10.00	1.00	1.85	E			22	10	1.85	24	3.01	3.38		3.38	14.10					14.10
SUMINISTRO UMAE-20	24.00	10.00	1.00	2.90	E			24	10	2.90	24	5.01	5.60		5.60	23.49					23.49
SUMINISTRO UMAE-20	28.00	14.00	1.00	4.02	E			28	14	4.02	24	8.58	9.39		9.39	40.23					40.23
SUMINISTRO UMAE-20	32.00	16.00	1.00	4.02	E			32	16	4.02	22	9.80	10.62		10.62	55.09				55.09	
SUMINISTRO UMAE-20	12.00	12.00	1.00	0.40	E			12	12	0.40	24	0.49	0.57		0.57	2.29					2.29
VENTILACION MECANICA VS-01	12.00	6.00	1.00	1.70				12	6	1.70	24	1.55				7.29					7.29
VENTILACION MECANICA VS-01	12.00	12.00	1.00	0.37				12	12	0.37	24	0.45				2.12					2.12
VENTILACION MECANICA VS-01	12.00	6.00	1.00	0.12				12	6	0.12	24	0.11				0.51					0.51

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
VENTILACION MECANICA VS-01	20.00	6.00	1.00	0.53				20	6	0.53	24	0.70				3.28					3.28
VENTILACION MECANICA VS-01	20.00	6.00	1.00	2.01				20	6	2.01	24	2.65				12.45					12.45
VENTILACION MECANICA VS-01	12.00	12.00	1.00	0.37				12	12	0.37	24	0.45				2.12					2.12
VENTILACION MECANICA VS-01	12.00	6.00	1.00	4.10				12	6	4.10	24	3.75				17.58					17.58
VENTILACION MECANICA VS-01	20.00	6.00	1.00	0.76				20	6	0.76	24	1.00				4.71					4.71
VENTILACION MECANICA VS-01	20.00	6.00	1.00	2.12				20	6	2.12	24	2.80				13.13					13.13
VENTILACION MECANICA VS-01	20.00	6.00	1.00	6.48				20	6	6.48	24	8.56				40.14					40.14
VENTILACION MECANICA VS-01	20.00	6.00	1.00	0.62				20	6	0.62	24	0.82				3.84					3.84
VENTILACION MECANICA VS-01	20.00	6.00	1.00	0.96				20	6	0.96	24	1.27				5.95					5.95
VENTILACION MECANICA VS-01	20.00	6.00	1.00	0.62				20	6	0.62	24	0.82				3.84					3.84
VENTILACION MECANICA VS-01	20.00	6.00	1.00	0.94				20	6	0.94	24	1.24				5.82					5.82
VENTILACION MECANICA VS-01	20.00	6.00	1.00	2.00				20	6	2.00	24	2.64				12.39					12.39
VENTILACION MECANICA VS-01	30.00	8.00	1.00	3.40				30	8	3.40	24	6.56				30.78					30.78
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.37				9	9	0.37	24	0.34				1.59					1.59
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.37				9	9	0.37	24	0.34				1.59					1.59
VENTILACION MECANICA VS-01	20.00	6.00	1.00	0.88				20	6	0.88	24	1.16				5.45					5.45
VENTILACION MECANICA VS-01	22.00	8.00	1.00	3.96				22	8	3.96	24	6.04				28.30					28.30
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.35				9	9	0.35	24	0.32				1.50					1.50
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.37				9	9	0.37	24	0.34				1.59					1.59
VENTILACION MECANICA VS-01	30.00	8.00	1.00	1.43				30	8	1.43	24	2.76				12.95					12.95
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.40				9	9	0.40	24	0.37				1.72					1.72
VENTILACION MECANICA VS-01	10.00	6.00	1.00	2.38				10	6	2.38	24	1.93				9.07					9.07
VENTILACION MECANICA VS-01	28.00	10.00	1.00	2.99				28	10	2.99	24	5.77				27.07					27.07
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.35				9	9	0.35	24	0.32				1.50					1.50
VENTILACION MECANICA VS-01	24.00	10.00	1.00	4.74				24	10	4.74	24	8.19				38.40					38.40
VENTILACION MECANICA VS-01	10.00	6.00	1.00	1.23				10	6	1.23	24	1.00				4.69					4.69
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.40				9	9	0.40	24	0.37				1.72					1.72
VENTILACION MECANICA VS-01	12.00	8.00	1.00	2.75				12	8	2.75	24	2.79				13.10					13.10
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.37				9	9	0.37	24	0.34				1.59					1.59
VENTILACION MECANICA VS-01	10.00	6.00	1.00	3.02				10	6	3.02	24	2.45				11.51					11.51
VENTILACION MECANICA VS-01	12.00	10.00	1.00	2.94				12	10	2.94	24	3.29				15.41					15.41
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.35				9	9	0.35	24	0.32				1.50					1.50
VENTILACION MECANICA VS-01	36.00	10.00	1.00	0.51				36	10	0.51	22	1.19				6.70			6.70		
VENTILACION MECANICA VS-01	36.00	10.00	1.00	0.26				36	10	0.26	22	0.61				3.41			3.41		
VENTILACION MECANICA VS-01D	24.00	14.00	1.00	0.23				24	14	0.23	24	0.44				2.08					2.08
VENTILACION MECANICA VS-01D	24.00	14.00	1.00	0.09				24	14	0.09	24	0.17				0.81					0.81
VENTILACION MECANICA VS-03	10.00	6.00	1.00	1.72				10	6	1.72	24	1.40				6.56					6.56
VENTILACION MECANICA VS-03	9.00	9.00	1.00	0.05				9	9	0.05	24	0.05				0.21					0.21
VENTILACION MECANICA VS-03	16.00	6.00	1.00	3.19				16	6	3.19	24	3.57				16.72					16.72
VENTILACION MECANICA VS-03	10.00	6.00	1.00	5.33				10	6	5.33	24	4.33				20.32					20.32
VENTILACION MECANICA VS-03	9.00	9.00	1.00	0.06				9	9	0.06	24	0.05				0.26					0.26
VENTILACION MECANICA VS-03	10.00	6.00	1.00	11.69				10	6	11.69	24	9.50				44.56					44.56
VENTILACION MECANICA VS-03	10.00	6.00	1.00	1.03				10	6	1.03	24	0.84				3.93					3.93
VENTILACION MECANICA VS-03D	16.00	6.00	1.00	14.40				16	6	14.40	24	16.09				75.48					75.48
VENTILACION MECANICA VS-08	10.00	4.00	1.00	1.13				10	4	1.13	24	0.80				3.77					3.77
VENTILACION MECANICA VS-08	10.00	4.00	1.00	1.88				10	4	1.88	24	1.34				6.27					6.27
VENTILACION MECANICA VS-08	9.00	9.00	1.00	0.45				9	9	0.45	24	0.41				1.93					1.93
VENTILACION MECANICA VS-08D	10.00	4.00	1.00	8.64				10	4	8.64	24	6.14				28.82					28.82
VENTILACION MECANICA VS-09	10.00	4.00	1.00	1.15				10	4	1.15	24	0.82				3.84					3.84
VENTILACION MECANICA VS-09	10.00	4.00	1.00	1.88				10	4	1.88	24	1.34				6.27					6.27
VENTILACION MECANICA VS-09	9.00	9.00	1.00	0.27				9	9	0.27	24	0.25				1.16					1.16
VENTILACION MECANICA VS-09D	10.00	4.00	1.00	8.64				10	4	8.64	24	6.14				28.82					28.82
VENTILACION MECANICA VS-10	10.00	4.00	1.00	1.26				10	4	1.26	24	0.90				4.20					4.20
VENTILACION MECANICA VS-10	10.00	4.00	1.00	3.34				10	4	3.34	24	2.38				11.14					11.14
VENTILACION MECANICA VS-10	9.00	9.00	1.00	0.45				9	9	0.45	24	0.41				1.93					1.93
VENTILACION MECANICA VS-10	9.00	9.00	1.00	0.45				9	9	0.45	24	0.41				1.93					1.93
VENTILACION MECANICA VS-10	10.00	4.00	1.00	0.18				10	4	0.18	24	0.13				0.60					0.60
VENTILACION MECANICA VS-10	10.00	6.00	1.00	2.38				10	6	2.38	24	1.93				9.07					9.07
VENTILACION MECANICA VS-10D	10.00	6.00	1.00	1.62				10	6	1.62	24	1.32				6.18					6.18

TABLA DE DATOS																					
																	CALIBRE				
DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	AISLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
ACCESORIOS																					
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
A EXTERIOR UFCO-01 al 05	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
A EXTERIOR UFCO-01 al 05	10.00	6.00	1.00	0.30	Transicion			10	6	0.30	24	0.24				1.14					1.14
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
A EXTERIOR UFCO-01 al 05	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
A EXTERIOR UFCO-10 11	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
A EXTERIOR UFCO-10 11	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
A EXTERIOR UFCO-10 11	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
A EXTERIOR UFCO-10 11	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
A EXTERIOR UFCO-10 11	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
A EXTERIOR UFCO-10 11	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
A EXTERIOR URC-01	18.00	8.00	1.00	0.91	Codo			18	8	0.91	24	1.21				5.66					5.66
A EXTERIOR URC-01	18.00	8.00	1.00	0.91	Codo			18	8	0.91	24	1.21				5.66					5.66
A EXTERIOR URC-01	8.00	18.00	1.00	0.41	Codo			8	18	0.41	24	0.54				2.52					2.52
A EXTERIOR URC-01	18.00	8.00	1.00	0.91	Codo			18	8	0.91	24	1.21				5.66					5.66
A EXTERIOR URC-01	8.00	18.00	1.00	0.41	Codo			8	18	0.41	24	0.54				2.52					2.52
A EXTERIOR URC-01	8.00	18.00	1.00	0.41	Codo			8	18	0.41	24	0.54				2.52					2.52
A EXTERIOR URC-01	8.00	18.00	1.00	0.41	Codo			8	18	0.41	24	0.54				2.52					2.52
A EXTERIOR URC-01	8.00	18.00	1.00	0.41	Codo			8	18	0.41	24	0.54				2.52					2.52
A EXTERIOR URC-01	18.00	8.00	1.00	0.91	Codo			18	8	0.91	24	1.21				5.66					5.66
A EXTERIOR URC-01	8.00	18.00	1.00	0.41	Codo			8	18	0.41	24	0.54				2.52					2.52
A EXTERIOR URC-01	61.00	12.00	1.00	0.30	Transicion			61	12	0.30	20	1.11				7.98			7.98		
A EXTERIOR URC-01	18.00	8.00	1.00	0.30	Transicion redondo cuadrado			18	8	0.30	24	0.40				1.86					1.86
A EXTERIOR URC-01D	18.00	8.00	1.00	0.91	Codo			18	8	0.91	24	1.21				5.66					5.66
A EXTERIOR URC-01D	8.00	18.00	1.00	0.41	Codo			8	18	0.41	24	0.54				2.52					2.52
A EXTERIOR URC-01D	18.00	8.00	1.00	0.91	Codo			18	8	0.91	24	1.21				5.66					5.66
A EXTERIOR URC-01D	8.00	18.00	1.00	0.41	Codo			8	18	0.41	24	0.54				2.52					2.52
A EXTERIOR URC-01D	18.00	8.00	1.00	0.30	Transicion redondo cuadrado			18	8	0.30	24	0.40				1.86					1.86
A EXTERIOR URC-03	20.00	12.00	1.00	1.02	Codo			20	12	1.02	24	1.65				7.75					7.75
A EXTERIOR URC-03	20.00	12.00	1.00	1.02	Codo			20	12	1.02	24	1.65				7.75					7.75

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
A EXTERIOR URC-06	12.00	12.00	1.00	0.61	Codo			12	12	0.61	24	0.74				3.49					3.49
A EXTERIOR URC-06	12.00	12.00	1.00	0.61	Codo			12	12	0.61	24	0.74				3.49					3.49
A EXTERIOR URC-06	34.00	12.00	1.00	0.30	Transicion			34	12	0.30	22	0.70				3.94				3.94	
A EXTERIOR URC-06	36.00	12.00	1.00	0.30	Transicion			36	12	0.30	22	0.73				4.11				4.11	
A EXTERIOR URC-06	36.00	12.00	1.00	0.30	Transicion			36	12	0.30	22	0.73				4.11				4.11	
A EXTERIOR URC-06	12.00	12.00	1.00	0.30	Transicion			12	12	0.30	24	0.37				1.72					1.72
A EXTERIOR URC-06	10.00	10.00	1.00	0.15	Zapato			10	10	0.15	24	0.15				0.71					0.71
A EXTERIOR URC-07	12.00	12.00	1.00	0.61	Codo			12	12	0.61	24	0.74				3.49					3.49
A EXTERIOR URC-07	22.00	14.00	1.00	1.12	Codo			22	14	1.12	24	2.04				9.59					9.59
A EXTERIOR URC-07	14.00	22.00	1.00	0.71	Codo			14	22	0.71	24	1.30				6.10					6.10
A EXTERIOR URC-07	14.00	22.00	1.00	0.71	Codo			14	22	0.71	24	1.30				6.10					6.10
A EXTERIOR URC-07	14.00	22.00	1.00	0.71	Codo			14	22	0.71	24	1.30				6.10					6.10
A EXTERIOR URC-07	14.00	22.00	1.00	0.71	Codo			14	22	0.71	24	1.30				6.10					6.10
A EXTERIOR URC-07	22.00	14.00	1.00	1.12	Codo			22	14	1.12	24	2.04				9.59					9.59
A EXTERIOR URC-07	36.00	24.00	1.00	0.30	Transicion			36	24	0.30	22	0.91				5.14				5.14	
A EXTERIOR URC-07	43.00	24.00	1.00	0.30	Transicion			43	24	0.30	22	1.02				5.74				5.74	
A EXTERIOR URC-07	22.00	14.00	1.00	0.30	Transicion			22	14	0.30	24	0.55				2.57					2.57
A EXTERIOR URC-07	34.00	12.00	1.00	0.30	Transicion			34	12	0.30	22	0.70				3.94				3.94	
A EXTERIOR URC-07	12.00	12.00	1.00	0.15	Zapato			12	12	0.15	24	0.18				0.86					0.86
A EXTERIOR URC-08	20.00	14.00	1.00	1.02	Codo			20	14	1.02	24	1.75				8.23					8.23
A EXTERIOR URC-08	14.00	20.00	1.00	0.71	Codo			14	20	0.71	24	1.23				5.76					5.76
A EXTERIOR URC-08	20.00	14.00	1.00	1.02	Codo			20	14	1.02	24	1.75				8.23					8.23
A EXTERIOR URC-08	14.00	20.00	1.00	0.71	Codo			14	20	0.71	24	1.23				5.76					5.76
A EXTERIOR URC-08	34.00	12.00	1.00	0.30	Transicion			34	12	0.30	22	0.70				3.94				3.94	
A EXTERIOR URC-08	61.00	31.00	1.00	0.30	Transicion			61	31	0.30	20	1.40				10.05			10.05		
A EXTERIOR URC-09	14.00	14.00	1.00	0.71	Codo			14	14	0.71	24	1.01				4.74					4.74
A EXTERIOR URC-09	14.00	14.00	1.00	0.71	Codo			14	14	0.71	24	1.01				4.74					4.74
A EXTERIOR URC-09	14.00	14.00	1.00	0.71	Codo			14	14	0.71	24	1.01				4.74					4.74
A EXTERIOR URC-09	14.00	14.00	1.00	0.71	Codo			14	14	0.71	24	1.01				4.74					4.74
A EXTERIOR URC-09	14.00	14.00	1.00	0.71	Codo			14	14	0.71	24	1.01				4.74					4.74
A EXTERIOR URC-09	14.00	14.00	1.00	0.71	Codo			14	14	0.71	24	1.01				4.74					4.74
A EXTERIOR URC-09	36.00	12.00	1.00	0.30	Transicion			36	12	0.30	22	0.73				4.11				4.11	
A EXTERIOR URC-09	34.00	12.00	1.00	0.30	Transicion			34	12	0.30	22	0.70				3.94				3.94	
A EXTERIOR URC-11	18.00	14.00	1.00	0.91	Codo			18	14	0.91	24	1.49				6.97					6.97
A EXTERIOR URC-11	18.00	14.00	1.00	0.91	Codo			18	14	0.91	24	1.49				6.97					6.97
A EXTERIOR URC-11	18.00	14.00	1.00	0.91	Codo			18	14	0.91	24	1.49				6.97					6.97
A EXTERIOR URC-11	14.00	18.00	1.00	0.71	Codo			14	18	0.71	24	1.16				5.42					5.42
A EXTERIOR URC-11	18.00	14.00	1.00	0.91	Codo			18	14	0.91	24	1.49				6.97					6.97
A EXTERIOR URC-11	14.00	18.00	1.00	0.71	Codo			14	18	0.71	24	1.16				5.42					5.42
A EXTERIOR URC-11	18.00	14.00	1.00	0.91	Codo			18	14	0.91	24	1.49				6.97					6.97
A EXTERIOR URC-11	61.00	12.00	1.00	0.30	Transicion			61	12	0.30	20	1.11				7.98			7.98		
A EXTERIOR URC-11	18.00	14.00	1.00	0.30	Transicion redondo cuadrado			18	14	0.30	24	0.49				2.29					2.29
A EXTERIOR URC-11D	18.00	14.00	1.00	0.91	Codo			18	14	0.91	24	1.49				6.97					6.97
A EXTERIOR URC-11D	18.00	14.00	1.00	0.30	Transicion redondo cuadrado			18	14	0.30	24	0.49				2.29					2.29
A EXTERIOR URC-12	18.00	14.00	1.00	0.91	Codo			18	14	0.91	24	1.49				6.97					6.97
A EXTERIOR URC-12	18.00	14.00	1.00	0.91	Codo			18	14	0.91	24	1.49				6.97					6.97
A EXTERIOR URC-12	18.00	14.00	1.00	0.91	Codo			18	14	0.91	24	1.49				6.97					6.97
A EXTERIOR URC-12	14.00	18.00	1.00	0.71	Codo			14	18	0.71	24	1.16				5.42					5.42
A EXTERIOR URC-12	18.00	14.00	1.00	0.91	Codo			18	14	0.91	24	1.49				6.97					6.97
A EXTERIOR URC-12	18.00	14.00	1.00	0.71	Codo			18	14	0.71	24	1.16				5.42					5.42
A EXTERIOR URC-12	14.00	18.00	1.00	0.71	Codo			14	18	0.71	24	1.16				5.42					5.42
A EXTERIOR URC-12	18.00	18.00	1.00	0.71	Codo			18	18	0.71	24	1.16				5.42					5.42
A EXTERIOR URC-12	14.00	18.00	1.00	0.71	Codo			14	18	0.71	24	1.16				5.42					5.42
A EXTERIOR URC-12	14.00	18.00	1.00	0.71	Codo			14	18	0.71	24	1.16				5.42					5.42
A EXTERIOR URC-12	49.00	18.00	1.00	0.30	Transicion			49	18	0.30	22	1.02				5.74				5.74	
A EXTERIOR URC-12	18.00	14.00	1.00	0.30	Transicion			18	14	0.30	24	0.49				2.29					2.29
A EXTERIOR URC-12	18.00	14.00	1.00	0.30	Transicion redondo cuadrado			18	14	0.30	24	0.49				2.29					2.29
A EXTERIOR URC-12D	18.00	14.00	1.00	0.30	Transicion redondo cuadrado			18	14	0.30	24	0.49				2.29					2.29

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
A EXTERIOR URC-14	30.00	12.00	1.00	1.52	Codo			30	12	1.52	24	3.25				15.25					15.25
A EXTERIOR URC-14	30.00	12.00	1.00	1.52	Codo			30	12	1.52	24	3.25				15.25					15.25
A EXTERIOR URC-14	12.00	30.00	1.00	0.61	Codo			12	30	0.61	24	1.30				6.10					6.10
A EXTERIOR URC-14	12.00	30.00	1.00	0.61	Codo			12	30	0.61	24	1.30				6.10					6.10
A EXTERIOR URC-14	34.00	12.00	1.00	0.30	Transicion			34	12	0.30	22	0.70				3.94				3.94	
A EXTERIOR URC-14	74.00	12.00	1.00	0.30	Transicion			74	12	0.30	20	1.31				9.40		9.40			
EXTRACCION VE-01	8.00	10.00	1.00	0.30	Transicion			8	10	0.30	24	0.27				1.29					1.29
EXTRACCION VE-01	12.00	10.00	1.00	0.30	Transicion			12	10	0.30	24	0.34				1.57					1.57
EXTRACCION VE-01	14.00	10.00	1.00	0.30	Transicion			14	10	0.30	24	0.37				1.72					1.72
EXTRACCION VE-01	13.00	12.00	1.00	0.30	Transicion			13	12	0.30	24	0.38				1.79					1.79
EXTRACCION VE-01	14.00	6.00	1.00	0.15	Zapato			14	6	0.15	24	0.15				0.71					0.71
EXTRACCION VE-01	14.00	6.00	1.00	0.15	Zapato			14	6	0.15	24	0.15				0.71					0.71
EXTRACCION VE-01	14.00	6.00	1.00	0.15	Zapato			14	6	0.15	24	0.15				0.71					0.71
EXTRACCION VE-01	14.00	6.00	1.00	0.15	Zapato			14	6	0.15	24	0.15				0.71					0.71
EXTRACCION VE-01D	10.00	14.00	1.00	0.51	Codo			10	14	0.51	24	0.62				2.90					2.90
EXTRACCION VE-01D	14.00	10.00	1.00	0.71	Codo			14	10	0.71	24	0.87				4.07					4.07
EXTRACCION VE-01D	14.00	10.00	1.00	0.71	Codo			14	10	0.71	24	0.87				4.07					4.07
EXTRACCION VE-01D	10.00	14.00	1.00	0.51	Codo			10	14	0.51	24	0.62				2.90					2.90
EXTRACCION VE-01D	10.00	14.00	1.00	0.51	Codo			10	14	0.51	24	0.62				2.90					2.90
EXTRACCION VE-01D	14.00	10.00	1.00	0.71	Codo			14	10	0.71	24	0.87				4.07					4.07
EXTRACCION VE-01D	10.00	14.00	1.00	0.51	Codo			10	14	0.51	24	0.62				2.90					2.90
EXTRACCION VE-01D	14.00	10.00	1.00	0.71	Codo			14	10	0.71	24	0.87				4.07					4.07
EXTRACCION VE-01D	10.00	14.00	1.00	0.51	Codo			10	14	0.51	24	0.62				2.90					2.90
EXTRACCION VE-01D	10.00	14.00	1.00	0.51	Codo			10	14	0.51	24	0.62				2.90					2.90
EXTRACCION VE-01D	20.00	20.00	1.00	0.30	Transicion			20	20	0.30	24	0.61				2.86					2.86
EXTRACCION VE-02	10.00	4.00	1.00	0.51	Calsoncillo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-02	10.00	4.00	1.00	0.51	Calsoncillo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-02	10.00	4.00	1.00	0.51	Calsoncillo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-02	10.00	4.00	1.00	0.51	Calsoncillo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-02	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-02	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-02	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-02	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-02	16.00	30.00	1.00	0.81	Codo			16	30	0.81	24	1.90				8.91					8.91
EXTRACCION VE-02	12.00	4.00	1.00	0.61	Codo			12	4	0.61	24	0.50				2.32					2.32
EXTRACCION VE-02	12.00	4.00	1.00	0.61	Codo			12	4	0.61	24	0.50				2.32					2.32
EXTRACCION VE-02	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-02	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-02	26.00	14.00	1.00	1.32	Codo			26	14	1.32	24	2.68				12.59					12.59
EXTRACCION VE-02	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-02	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-02	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-02	30.00	16.00	1.00	1.52	Codo			30	16	1.52	24	3.56				16.70					16.70
EXTRACCION VE-02	30.00	16.00	1.00	1.52	Codo			30	16	1.52	24	3.56				16.70					16.70
EXTRACCION VE-02	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
EXTRACCION VE-02	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-02	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
EXTRACCION VE-02	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-02	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-02	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-02	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-02	18.00	10.00	1.00	0.91	Codo			18	10	0.91	24	1.30				6.10					6.10
EXTRACCION VE-02	18.00	10.00	1.00	0.91	Codo			18	10	0.91	24	1.30				6.10					6.10
EXTRACCION VE-02	14.00	8.00	1.00	0.71	Codo			14	8	0.71	24	0.79				3.73					3.73
EXTRACCION VE-02	14.00	8.00	1.00	0.71	Codo			14	8	0.71	24	0.79				3.73					3.73
EXTRACCION VE-02	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-02	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-02	24.00	12.00	1.00	1.22	Codo			24	12	1.22	24	2.23				10.46					10.46
EXTRACCION VE-02	24.00	12.00	1.00	1.22	Codo			24	12	1.22	24	2.23				10.46					10.46

TABLA DE DATOS																					
																	CALIBRE				
DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-02	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-02	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-02	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-02	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
EXTRACCION VE-02	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
EXTRACCION VE-02	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-02	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
EXTRACCION VE-02	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
EXTRACCION VE-02	10.00	6.00	1.00	0.30	Transicion			10	6	0.30	24	0.24				1.14					1.14
EXTRACCION VE-02	12.00	6.00	1.00	0.30	Transicion			12	6	0.30	24	0.27				1.29					1.29
EXTRACCION VE-02	16.00	6.00	1.00	0.30	Transicion			16	6	0.30	24	0.34				1.57					1.57
EXTRACCION VE-02	12.00	6.00	1.00	0.30	Transicion			12	6	0.30	24	0.27				1.29					1.29
EXTRACCION VE-02	10.00	6.00	1.00	0.30	Transicion			10	6	0.30	24	0.24				1.14					1.14
EXTRACCION VE-02	12.00	8.00	1.00	0.30	Transicion			12	8	0.30	24	0.30				1.43					1.43
EXTRACCION VE-02	18.00	10.00	1.00	0.30	Transicion			18	10	0.30	24	0.43				2.00					2.00
EXTRACCION VE-02	26.00	14.00	1.00	0.30	Transicion			26	14	0.30	24	0.61				2.86					2.86
EXTRACCION VE-02	16.00	6.00	1.00	0.30	Transicion			16	6	0.30	24	0.34				1.57					1.57
EXTRACCION VE-02	16.00	8.00	1.00	0.30	Transicion			16	8	0.30	24	0.37				1.72					1.72
EXTRACCION VE-02	12.00	8.00	1.00	0.30	Transicion			12	8	0.30	24	0.30				1.43					1.43
EXTRACCION VE-02	28.00	28.00	1.00	0.30	Transicion			28	28	0.30	24	0.85				4.00					4.00
EXTRACCION VE-02	16.00	6.00	1.00	0.30	Transicion			16	6	0.30	24	0.34				1.57					1.57
EXTRACCION VE-02	18.00	12.00	1.00	0.30	Transicion			18	12	0.30	24	0.46				2.14					2.14
EXTRACCION VE-02	24.00	12.00	1.00	0.30	Transicion			24	12	0.30	24	0.55				2.57					2.57
EXTRACCION VE-02	14.00	8.00	1.00	0.30	Transicion			14	8	0.30	24	0.34				1.57					1.57
EXTRACCION VE-02	18.00	10.00	1.00	0.30	Transicion redondo cuadrado			18	10	0.30	24	0.43				2.00					2.00
EXTRACCION VE-02	18.00	10.00	1.00	0.30	Transicion redondo cuadrado			18	10	0.30	24	0.43				2.00					2.00
EXTRACCION VE-02	24.00	12.00	1.00	0.30	Transicion redondo cuadrado			24	12	0.30	24	0.55				2.57					2.57
EXTRACCION VE-02	24.00	12.00	1.00	0.30	Transicion redondo cuadrado			24	12	0.30	24	0.55				2.57					2.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12									

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-02	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	10.00	6.00	1.00	0.15	Zapato			10	6	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-02	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-02	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-02	12.00	8.00	1.00	0.15	Zapato			12	8	0.15	24	0.15				0.71					0.71
EXTRACCION VE-02	16.00	6.00	1.00	0.15	Zapato			16	6	0.15	24	0.17				0.79					0.79
EXTRACCION VE-02	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-02	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-02	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-02	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-02	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	16.00	6.00	1.00	0.15	Zapato			16	6	0.15	24	0.17				0.79					0.79
EXTRACCION VE-02	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-02	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-02	16.00	8.00	1.00	0.15	Zapato			16	8	0.15	24	0.18				0.86					0.86
EXTRACCION VE-02	12.00	8.00	1.00	0.15	Zapato			12	8	0.15	24	0.15				0.71					0.71
EXTRACCION VE-02	26.00	14.00	1.00	0.15	Zapato			26	14	0.15	24	0.30				1.43					1.43
EXTRACCION VE-02	18.00	10.00	1.00	0.15	Zapato			18	10	0.15	24	0.21				1.00					1.00
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	16.00	6.00	1.00	0.15	Zapato			16	6	0.15	24	0.17				0.79					0.79
EXTRACCION VE-02	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	10.00	6.00	1.00	0.15	Zapato			10	6	0.15	24	0.12				0.57					0.57
EXTRACCION VE-02	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-03	8.00	14.00	1.00	0.41	Codo			8	14	0.41	24	0.45				2.13					2.13
EXTRACCION VE-03	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-03	14.00	8.00	1.00	0.71	Codo			14	8	0.71	24	0.79				3.73					3.73
EXTRACCION VE-03	8.00	14.00	1.00	0.41	Codo			8	14	0.41	24	0.45				2.13					2.13
EXTRACCION VE-03	8.00	14.00	1.00	0.41	Codo			8	14	0.41	24	0.45				2.13					2.13
EXTRACCION VE-03	8.00	14.00	1.00	0.41	Codo			8	14	0.41	24	0.45				2.13					2.13
EXTRACCION VE-03	14.00	8.00	1.00	0.71	Codo			14	8	0.71	24	0.79				3.73					3.73
EXTRACCION VE-03	8.00	14.00	1.00	0.41	Codo			8	14	0.41	24	0.45				2.13					2.13
EXTRACCION VE-03	14.00	8.00	1.00	0.71	Codo			14	8	0.71	24	0.79				3.73					3.73
EXTRACCION VE-03	14.00	8.00	1.00	0.71	Codo			14	8	0.71	24	0.79				3.73					3.73
EXTRACCION VE-03	14.00	8.00	1.00	0.30	Transicion			14	8	0.30	24	0.34				1.57					1.57
EXTRACCION VE-03	24.00	24.00	1.00	0.30	Transicion			24	24	0.30	24	0.73				3.43					3.43
EXTRACCION VE-03	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-03	12.00	12.00	1.00	0.15	Zapato			12	12	0.15	24	0.18				0.86					0.86

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-03	14.00	6.00	1.00	0.15	Zapato			14	6	0.15	24	0.15				0.71					0.71
EXTRACCION VE-08	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-08	12.00	6.00	1.00	0.61	Codo			12	6	0.61	24	0.56				2.61					2.61
EXTRACCION VE-08	6.00	12.00	1.00	0.30	Codo			6	12	0.30	24	0.28				1.31					1.31
EXTRACCION VE-08	6.00	12.00	1.00	0.30	Codo			6	12	0.30	24	0.28				1.31					1.31
EXTRACCION VE-08	12.00	6.00	1.00	0.61	Codo			12	6	0.61	24	0.56				2.61					2.61
EXTRACCION VE-08	6.00	12.00	1.00	0.30	Codo			6	12	0.30	24	0.28				1.31					1.31
EXTRACCION VE-08	6.00	12.00	1.00	0.30	Codo			6	12	0.30	24	0.28				1.31					1.31
EXTRACCION VE-08	12.00	6.00	1.00	0.61	Codo			12	6	0.61	24	0.56				2.61					2.61
EXTRACCION VE-08	6.00	12.00	1.00	0.30	Codo			6	12	0.30	24	0.28				1.31					1.31
EXTRACCION VE-08	12.00	6.00	1.00	0.30	Transicion			12	6	0.30	24	0.27				1.29					1.29
EXTRACCION VE-08	21.00	21.00	1.00	0.30	Transicion			21	21	0.30	24	0.64				3.00					3.00
EXTRACCION VE-08	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-08	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-08	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-08	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-08	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-09	14.00	8.00	1.00	0.71	Codo			14	8	0.71	24	0.79				3.73					3.73
EXTRACCION VE-09	14.00	8.00	1.00	0.71	Codo			14	8	0.71	24	0.79				3.73					3.73
EXTRACCION VE-09	14.00	8.00	1.00	0.71	Codo			14	8	0.71	24	0.79				3.73					3.73
EXTRACCION VE-09	14.00	8.00	1.00	0.71	Codo			14	8	0.71	24	0.79				3.73					3.73
EXTRACCION VE-09	8.00	14.00	1.00	0.41	Codo			8	14	0.41	24	0.45				2.13					2.13
EXTRACCION VE-09	8.00	14.00	1.00	0.41	Codo			8	14	0.41	24	0.45				2.13					2.13
EXTRACCION VE-09	14.00	8.00	1.00	0.71	Codo			14	8	0.71	24	0.79				3.73					3.73
EXTRACCION VE-09	14.00	8.00	1.00	0.71	Codo			14	8	0.71	24	0.79				3.73					3.73
EXTRACCION VE-09	14.00	8.00	1.00	0.71	Codo			14	8	0.71	24	0.79				3.73					3.73
EXTRACCION VE-09	8.00	14.00	1.00	0.41	Codo			8	14	0.41	24	0.45				2.13					2.13
EXTRACCION VE-09	8.00	14.00	1.00	0.41	Codo			8	14	0.41	24	0.45				2.13					2.13
EXTRACCION VE-09	14.00	8.00	1.00	0.71	Codo			14	8	0.71	24	0.79				3.73					3.73
EXTRACCION VE-09	8.00	14.00	1.00	0.41	Codo			8	14	0.41	24	0.45				2.13					2.13
EXTRACCION VE-09	8.00	14.00	1.00	0.41	Codo			8	14	0.41	24	0.45				2.13					2.13
EXTRACCION VE-09	8.00	14.00	1.00	0.41	Codo			8	14	0.41	24	0.45				2.13					2.13
EXTRACCION VE-09	21.00	21.00	1.00	0.30	Transicion			21	21	0.30	24	0.64				3.00					3.00
EXTRACCION VE-09	14.00	8.00	1.00	0.30	Transicion			14	8	0.30	24	0.34				1.57					1.57
EXTRACCION VE-09	10.00	10.00	1.00	0.15	Zapato			10	10	0.15	24	0.15				0.71					0.71
EXTRACCION VE-09	10.00	10.00	1.00	0.15	Zapato			10	10	0.15	24	0.15				0.71					0.71
EXTRACCION VE-10	14.00	6.00	1.00	0.71	Codo			14	6	0.71	24	0.72				3.39					3.39
EXTRACCION VE-10	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-10	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-10	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-10	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-10	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-10	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-10	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-10	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-10	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-10	28.00	14.00	1.00	1.42	Codo			28	14	1.42	24	3.03				14.23					14.23
EXTRACCION VE-10	14.00	28.00	1.00	0.71	Codo			14	28	0.71	24	1.52				7.12					7.12
EXTRACCION VE-10	14.00	28.00	1.00	0.71	Codo			14	28	0.71	24	1.52				7.12					7.12
EXTRACCION VE-10	28.00	14.00	1.00	1.42	Codo			28	14	1.42	24	3.03				14.23					14.23
EXTRACCION VE-10	14.00	6.00	1.00	0.71	Codo			14	6	0.71	24	0.72				3.39					3.39
EXTRACCION VE-10	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
EXTRACCION VE-10	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
EXTRACCION VE-10	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
EXTRACCION VE-10	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
EXTRACCION VE-10	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-10	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-10	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69

TABLA DE DATOS

																	CALIBRE				
DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTA L	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-10	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
EXTRACCION VE-10	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-10	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
EXTRACCION VE-10	10.00	16.00	1.00	0.51	Codo			10	16	0.51	24	0.67				3.15					3.15
EXTRACCION VE-10	10.00	16.00	1.00	0.51	Codo			10	16	0.51	24	0.67				3.15					3.15
EXTRACCION VE-10	10.00	24.00	1.00	0.51	Codo			10	24	0.51	24	0.88				4.12					4.12
EXTRACCION VE-10	8.00	14.00	1.00	0.41	Codo			8	14	0.41	24	0.45				2.13					2.13
EXTRACCION VE-10	8.00	14.00	1.00	0.41	Codo			8	14	0.41	24	0.45				2.13					2.13
EXTRACCION VE-10	10.00	24.00	1.00	0.51	Codo			10	24	0.51	24	0.88				4.12					4.12
EXTRACCION VE-10	12.00	26.00	1.00	0.61	Codo			12	26	0.61	24	1.18				5.52					5.52
EXTRACCION VE-10	12.00	26.00	1.00	0.61	Codo			12	26	0.61	24	1.18				5.52					5.52
EXTRACCION VE-10	14.00	28.00	1.00	0.71	Codo			14	28	0.71	24	1.52				7.12					7.12
EXTRACCION VE-10	28.00	14.00	1.00	1.42	Codo			28	14	1.42	24	3.03				14.23					14.23
EXTRACCION VE-10	10.00	24.00	1.00	0.51	Codo			10	24	0.51	24	0.88				4.12					4.12
EXTRACCION VE-10	10.00	24.00	1.00	0.51	Codo			10	24	0.51	24	0.88				4.12					4.12
EXTRACCION VE-10	16.00	10.00	1.00	0.81	Codo			16	10	0.81	24	1.07				5.03					5.03
EXTRACCION VE-10	16.00	10.00	1.00	0.81	Codo			16	10	0.81	24	1.07				5.03					5.03
EXTRACCION VE-10	16.00	10.00	1.00	0.81	Codo			16	10	0.81	24	1.07				5.03					5.03
EXTRACCION VE-10	12.00	6.00	1.00	0.30	Transicion			12	6	0.30	24	0.27				1.29					1.29
EXTRACCION VE-10	14.00	6.00	1.00	0.30	Transicion			14	6	0.30	24	0.30				1.43					1.43
EXTRACCION VE-10	10.00	6.00	1.00	0.30	Transicion			10	6	0.30	24	0.24				1.14					1.14
EXTRACCION VE-10	10.00	6.00	1.00	0.30	Transicion			10	6	0.30	24	0.24				1.14					1.14
EXTRACCION VE-10	28.00	28.00	1.00	0.30	Transicion			28	28	0.30	24	0.85				4.00					4.00
EXTRACCION VE-10	16.00	8.00	1.00	0.30	Transicion			16	8	0.30	24	0.37				1.72					1.72
EXTRACCION VE-10	24.00	10.00	1.00	0.30	Transicion			24	10	0.30	24	0.52				2.43					2.43
EXTRACCION VE-10	14.00	8.00	1.00	0.30	Transicion			14	8	0.30	24	0.34				1.57					1.57
EXTRACCION VE-10	26.00	12.00	1.00	0.30	Transicion			26	12	0.30	24	0.58				2.72					2.72
EXTRACCION VE-10	12.00	6.00	1.00	0.30	Transicion			12	6	0.30	24	0.27				1.29					1.29
EXTRACCION VE-10	18.00	6.00	1.00	0.30	Transicion			18	6	0.30	24	0.37				1.72					1.72
EXTRACCION VE-10	24.00	14.00	1.00	0.30	Transicion			24	14	0.30	24	0.58				2.72					2.72
EXTRACCION VE-10	28.00	14.00	1.00	0.30	Transicion			28	14	0.30	24	0.64				3.00					3.00
EXTRACCION VE-10	12.00	8.00	1.00	0.30	Transicion			12	8	0.30	24	0.30				1.43					1.43
EXTRACCION VE-10	14.00	8.00	1.00	0.30	Transicion			14	8	0.30	24	0.34				1.57					1.57
EXTRACCION VE-10	16.00	10.00	1.00	0.30	Transicion redondo cuadrado			16	10	0.30	24	0.40				1.86					1.86
EXTRACCION VE-10	16.00	10.00	1.00	0.30	Transicion redondo cuadrado			16	10	0.30	24	0.40				1.86					1.86
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15											

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	16.00	8.00	1.00	0.15	Zapato			16	8	0.15	24	0.18				0.86					0.86
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	14.00	6.00	1.00	0.15	Zapato			14	6	0.15	24	0.15				0.71					0.71
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	14.00	8.00	1.00	0.15	Zapato			14	8	0.15	24	0.17				0.79					0.79
EXTRACCION VE-10	14.00	8.00	1.00	0.15	Zapato			14	8	0.15	24	0.17				0.79					0.79
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	12.00	6.00	1.00	0.15	Zapato			12	6	0.15	24	0.14				0.64					0.64
EXTRACCION VE-10	26.00	12.00	1.00	0.15	Zapato			26	12	0.15	24	0.29				1.36					1.36
EXTRACCION VE-10	10.00	6.00	1.00	0.15	Zapato			10	6	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-10	18.00	6.00	1.00	0.15	Zapato			18	6	0.15	24	0.18				0.86					0.86
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	10.00	6.00	1.00	0.15	Zapato			10	6	0.15	24	0.12				0.57					0.57
EXTRACCION VE-10	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-18	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-18	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-18	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-18	12.00	6.00	1.00	0.61	Codo			12	6	0.61	24	0.56				2.61					2.61
EXTRACCION VE-18	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-18	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-18	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-18	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-18	16.00	10.00	1.00	0.81	Codo			16	10	0.81	24	1.07				5.03					5.03
EXTRACCION VE-18	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-18	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-18	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-18	30.00	14.00	1.00	1.52	Codo			30	14	1.52	24	3.41				15.98					15.98
EXTRACCION VE-18	12.00	4.00	1.00	0.61	Codo			12	4	0.61	24	0.50				2.32					2.32
EXTRACCION VE-18	14.00	30.00	1.00	0.71	Codo			14	30	0.71	24	1.59				7.46					7.46
EXTRACCION VE-18	16.00	10.00	1.00	0.81	Codo			16	10	0.81	24	1.07				5.03					5.03
EXTRACCION VE-18	16.00	10.00	1.00	0.81	Codo			16	10	0.81	24	1.07				5.03					5.03
EXTRACCION VE-18	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-18	8.00	14.00	1.00	0.41	Codo			8	14	0.41	24	0.45				2.13					2.13
EXTRACCION VE-18	8.00	14.00	1.00	0.41	Codo			8	14	0.41	24	0.45				2.13					2.13
EXTRACCION VE-18	14.00	30.00	1.00	0.71	Codo			14	30	0.71	24	1.59				7.46					7.46
EXTRACCION VE-18	30.00	14.00	1.00	1.52	Codo			30	14	1.52	24	3.41				15.98					15.98
EXTRACCION VE-18	14.00	30.00	1.00	0.71	Codo			14	30	0.71	24	1.59				7.46					7.46
EXTRACCION VE-18	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
EXTRACCION VE-18	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
EXTRACCION VE-18	8.00	14.00	1.00	0.41	Codo			8	14	0.41	24	0.45				2.13					2.13
EXTRACCION VE-18	8.00	14.00	1.00	0.41	Codo			8	14	0.41	24	0.45				2.13					2.13
EXTRACCION VE-18	14.00	14.00	1.00	0.71	Codo			14	14	0.71	24	1.01				4.74					4.74
EXTRACCION VE-18	20.00	14.00	1.00	1.02	Codo			20	14	1.02	24	1.75				8.23					8.23
EXTRACCION VE-18	10.00	8.00	1.00	0.30	Transicion			10	8	0.30	24	0.27				1.29					1.29
EXTRACCION VE-18	10.00	6.00	1.00	0.30	Transicion			10	6	0.30	24	0.24				1.14					1.14
EXTRACCION VE-18	12.00	6.00	1.00	0.30	Transicion			12	6	0.30	24	0.27				1.29					1.29
EXTRACCION VE-18	12.00	8.00	1.00	0.30	Transicion			12	8	0.30	24	0.30				1.43					1.43
EXTRACCION VE-18	10.00	6.00	1.00	0.30	Transicion			10	6	0.30	24	0.24				1.14					1.14
EXTRACCION VE-18	10.00	6.00	1.00	0.30	Transicion			10	6	0.30	24	0.24				1.14					1.14
EXTRACCION VE-18	10.00	6.00	1.00	0.30	Transicion			10	6	0.30	24	0.24				1.14					1.14
EXTRACCION VE-18	10.00	6.00	1.00	0.30	Transicion			10	6	0.30	24	0.24				1.14					1.14
EXTRACCION VE-18	12.00	10.00	1.00	0.30	Transicion			12	10	0.30	24	0.34				1.57					1.57
EXTRACCION VE-18	16.00	10.00	1.00	0.30	Transicion			16	10	0.30	24	0.40				1.86					1.86
EXTRACCION VE-18	10.00	6.00	1.00	0.30	Transicion			10	6	0.30	24	0.24				1.14					1.14
EXTRACCION VE-18	22.00	12.00	1.00	0.30	Transicion			22	12	0.30	24	0.52				2.43					2.43
EXTRACCION VE-18	30.00	14.00	1.00	0.30	Transicion			30	14	0.30	24	0.67				3.14					3.14
EXTRACCION VE-18	28.00	28.00	1.00	0.30	Transicion			28	28	0.30	24	0.85				4.00					4.00
EXTRACCION VE-18	16.00	12.00	1.00	0.30	Transicion			16	12	0.30	24	0.43				2.00					2.00
EXTRACCION VE-18	16.00	6.00	1.00	0.30	Transicion			16	6	0.30	24	0.34				1.57					1.57
EXTRACCION VE-18	18.00	10.00	1.00	0.30	Transicion			18	10	0.30	24	0.43				2.00					2.00
EXTRACCION VE-18	16.00	10.00	1.00	0.30	Transicion			16	10	0.30	24	0.40				1.86					1.86
EXTRACCION VE-18	14.00	8.00	1.00	0.30	Transicion			14	8	0.30	24	0.34				1.57					1.57
EXTRACCION VE-18	20.00	14.00	1.00	0.30	Transicion			20	14	0.30	24	0.52				2.43					2.43
EXTRACCION VE-18	34.00	12.00	1.00	0.30	Transicion			34	12	0.30	22	0.70				3.94				3.94	
EXTRACCION VE-18	34.00	12.00	1.00	0.30	Transicion			34	12	0.30	22	0.70				3.94				3.94	
EXTRACCION VE-18	30.00	14.00	1.00	0.30	Transicion			30	14	0.30	24	0.67				3.14					3.14
EXTRACCION VE-18	14.00	14.00	1.00	0.30	Transicion			14	14	0.30	24	0.43				2.00					2.00
EXTRACCION VE-18	10.00	8.00	1.00	0.30	Transicion			10	8	0.30	24	0.27				1.29					1.29
EXTRACCION VE-18	10.00	6.00	1.00	0.30	Transicion			10	6	0.30	24	0.24				1.14					1.14
EXTRACCION VE-18	20.00	14.00	1.00	0.30	Yee plana			20	14	0.30	24	0.52				2.43					2.43
EXTRACCION VE-18	14.00	14.00	1.00	0.30	Yee plana			14	14	0.30	24	0.43				2.00					2.00
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-18	10.00	6.00	1.00	0.15	Zapato			10	6	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	10.00	8.00	1.00	0.15	Zapato			10	8	0.15	24	0.14				0.64					0.64
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	10.00	6.00	1.00	0.15	Zapato			10	6	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	10.00	6.00	1.00	0.15	Zapato			10	6	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-18	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	10.00	6.00	1.00	0.15	Zapato			10	6	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	10.00	10.00	1.00	0.15	Zapato			10	10	0.15	24	0.15				0.71					0.71
EXTRACCION VE-18	18.00	10.00	1.00	0.15	Zapato			18	10	0.15	24	0.21				1.00					1.00
EXTRACCION VE-18	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-18	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-18	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-18	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-18	22.00	12.00	1.00	0.15	Zapato			22	12	0.15	24	0.26				1.22					1.22
EXTRACCION VE-18	12.00	4.00	1.00	0.15	Zapato			12	4	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-18	16.00	6.00	1.00	0.15	Zapato			16	6	0.15	24	0.17				0.79					0.79
EXTRACCION VE-18	20.00	14.00	1.00	0.15	Zapato			20	14	0.15	24	0.26				1.22					1.22
EXTRACCION VE-19	20.00	10.00	1.00	1.02	Codo			20	10	1.02	24	1.55				7.26					7.26
EXTRACCION VE-19	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-19	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-19	12.00	8.00	1.00	0.61	Codo			12	8	0.61	24	0.62				2.90					2.90
EXTRACCION VE-19	12.00	8.00	1.00	0.61	Codo			12	8	0.61	24	0.62				2.90					2.90
EXTRACCION VE-19	14.00	6.00	1.00	0.71	Codo			14	6	0.71	24	0.72				3.39					3.39
EXTRACCION VE-19	12.00	24.00	1.00	0.61	Codo			12	24	0.61	24	1.11				5.23					5.23
EXTRACCION VE-19	12.00	24.00	1.00	0.61	Codo			12	24	0.61	24	1.11				5.23					5.23
EXTRACCION VE-19	12.00	24.00	1.00	0.61	Codo			12	24	0.61	24	1.11				5.23					5.23

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-19	20.00	10.00	1.00	0.30	Transicion			20	10	0.30	24	0.46				2.14					2.14
EXTRACCION VE-19	12.00	8.00	1.00	0.30	Transicion			12	8	0.30	24	0.30				1.43					1.43
EXTRACCION VE-19	24.00	12.00	1.00	0.30	Transicion			24	12	0.30	24	0.55				2.57					2.57
EXTRACCION VE-19	28.00	28.00	1.00	0.30	Transicion			28	28	0.30	24	0.85				4.00					4.00
EXTRACCION VE-19	34.00	12.00	1.00	0.30	Transicion			34	12	0.30	22	0.70				3.94			3.94		
EXTRACCION VE-19	24.00	12.00	1.00	0.30	Transicion			24	12	0.30	24	0.55				2.57					2.57
EXTRACCION VE-19	14.00	14.00	1.00	0.15	Zapato			14	14	0.15	24	0.21				1.00					1.00
EXTRACCION VE-19	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-19	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-19	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-19	12.00	12.00	1.00	0.15	Zapato			12	12	0.15	24	0.18				0.86					0.86
EXTRACCION VE-19	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-19	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-19	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-19	10.00	6.00	1.00	0.15	Zapato			10	6	0.15	24	0.12				0.57					0.57
EXTRACCION VE-19	14.00	6.00	1.00	0.15	Zapato			14	6	0.15	24	0.15				0.71					0.71
EXTRACCION VE-19	10.00	6.00	1.00	0.15	Zapato			10	6	0.15	24	0.12				0.57					0.57
EXTRACCION VE-19	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-19	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-19	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-19	10.00	6.00	1.00	0.15	Zapato			10	6	0.15	24	0.12				0.57					0.57
EXTRACCION VE-19	14.00	6.00	1.00	0.15	Zapato			14	6	0.15	24	0.15				0.71					0.71
EXTRACCION VE-19	10.00	6.00	1.00	0.15	Zapato			10	6	0.15	24	0.12				0.57					0.57
EXTRACCION VE-19	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-19	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-20	6.00	16.00	1.00	0.30	Codo			6	16	0.30	24	0.34				1.60					1.60
EXTRACCION VE-20	16.00	10.00	1.00	0.81	Codo			16	10	0.81	24	1.07				5.03					5.03
EXTRACCION VE-20	6.00	14.00	1.00	0.30	Codo			6	14	0.30	24	0.31				1.45					1.45
EXTRACCION VE-20	6.00	14.00	1.00	0.30	Codo			6	14	0.30	24	0.31				1.45					1.45
EXTRACCION VE-20	6.00	14.00	1.00	0.30	Codo			6	14	0.30	24	0.31				1.45					1.45
EXTRACCION VE-20	14.00	24.00	1.00	0.71	Codo			14	24	0.71	24	1.37				6.44					6.44
EXTRACCION VE-20	14.00	24.00	1.00	0.71	Codo			14	24	0.71	24	1.37				6.44					6.44
EXTRACCION VE-20	12.00	24.00	1.00	0.61	Codo			12	24	0.61	24	1.11				5.23					5.23
EXTRACCION VE-20	12.00	24.00	1.00	0.61	Codo			12	24	0.61	24	1.11				5.23					5.23
EXTRACCION VE-20	24.00	14.00	1.00	1.22	Codo			24	14	1.22	24	2.35				11.04					11.04
EXTRACCION VE-20	14.00	24.00	1.00	0.71	Codo			14	24	0.71	24	1.37				6.44					6.44
EXTRACCION VE-20	14.00	24.00	1.00	0.71	Codo			14	24	0.71	24	1.37				6.44					6.44
EXTRACCION VE-20	14.00	24.00	1.00	0.71	Codo			14	24	0.71	24	1.37				6.44					6.44
EXTRACCION VE-20	14.00	24.00	1.00	0.71	Codo			14	24	0.71	24	1.37				6.44					6.44
EXTRACCION VE-20	16.00	6.00	1.00	0.81	Codo			16	6	0.81	24	0.91				4.26					4.26
EXTRACCION VE-20	6.00	16.00	1.00	0.30	Codo			6	16	0.30	24	0.34				1.60					1.60
EXTRACCION VE-20	14.00	24.00	1.00	0.71	Codo			14	24	0.71	24	1.37				6.44					6.44
EXTRACCION VE-20	14.00	24.00	1.00	0.71	Codo			14	24	0.71	24	1.37				6.44					6.44
EXTRACCION VE-20	24.00	14.00	1.00	1.22	Codo			24	14	1.22	24	2.35				11.04					11.04
EXTRACCION VE-20	16.00	10.00	1.00	0.30	Transicion			16	10	0.30	24	0.40				1.86					1.86
EXTRACCION VE-20	18.00	12.00	1.00	0.30	Transicion			18	12	0.30	24	0.46				2.14					2.14
EXTRACCION VE-20	24.00	24.00	1.00	0.30	Transicion			24	24	0.30	24	0.73				3.43					3.43
EXTRACCION VE-20	24.00	14.00	1.00	0.30	Transicion			24	14	0.30	24	0.58				2.72					2.72
EXTRACCION VE-20	24.00	12.00	1.00	0.30	Transicion			24	12	0.30	24	0.55				2.57					2.57
EXTRACCION VE-20	24.00	14.00	1.00	0.30	Transicion			24	14	0.30	24	0.58				2.72					2.72
EXTRACCION VE-20	34.00	12.00	1.00	0.30	Transicion			34	12	0.30	22	0.70				3.94			3.94		
EXTRACCION VE-20	14.00	14.00	1.00	0.15	Zapato			14	14	0.15	24	0.21				1.00					1.00
EXTRACCION VE-20	14.00	14.00	1.00	0.15	Zapato			14	14	0.15	24	0.21				1.00					1.00
EXTRACCION VE-20	16.00	6.00	1.00	0.15	Zapato			16	6	0.15	24	0.17				0.79					0.79
EXTRACCION VE-20	12.00	12.00	1.00	0.15	Zapato			12	12	0.15	24	0.18				0.86					0.86
EXTRACCION VE-20	12.00	12.00	1.00	0.15	Zapato			12	12	0.15	24	0.18				0.86					0.86
EXTRACCION VE-20	12.00	12.00	1.00	0.15	Zapato			12	12	0.15	24	0.18				0.86					0.86

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-20	12.00	12.00	1.00	0.15	Zapato			12	12	0.15	24	0.18				0.86					0.86
EXTRACCION VE-20	14.00	6.00	1.00	0.15	Zapato			14	6	0.15	24	0.15				0.71					0.71
EXTRACCION VE-20	14.00	6.00	1.00	0.15	Zapato			14	6	0.15	24	0.15				0.71					0.71
EXTRACCION VE-20	14.00	6.00	1.00	0.15	Zapato			14	6	0.15	24	0.15				0.71					0.71
EXTRACCION VE-20	14.00	6.00	1.00	0.15	Zapato			14	6	0.15	24	0.15				0.71					0.71
EXTRACCION VE-21	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-21	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-21	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-21	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-21	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-21	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-21	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-21	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-21	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-21	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-21	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-21	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-21	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-21	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-21	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-21	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-21	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-21	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-21	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-21	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-21	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-21	24.00	24.00	1.00	0.30	Transicion			24	24	0.30	24	0.73				3.43					3.43
EXTRACCION VE-21	10.00	6.00	1.00	0.30	Transicion			10	6	0.30	24	0.24				1.14					1.14
EXTRACCION VE-21	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-21	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-21	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-21	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-24	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-24	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-24	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-24	14.00	8.00	1.00	0.71	Codo			14	8	0.71	24	0.79				3.73					3.73
EXTRACCION VE-24	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-24	14.00	22.00	1.00	0.71	Codo			14	22	0.71	24	1.30				6.10					6.10
EXTRACCION VE-24	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-24	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-24	14.00	22.00	1.00	0.71	Codo			14	22	0.71	24	1.30				6.10					6.10
EXTRACCION VE-24	22.00	14.00	1.00	1.12	Codo			22	14	1.12	24	2.04				9.59					9.59
EXTRACCION VE-24	14.00	22.00	1.00	0.71	Codo			14	22	0.71	24	1.30				6.10					6.10
EXTRACCION VE-24	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
EXTRACCION VE-24	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
EXTRACCION VE-24	4.00	10.00	1.00	0.20	Codo			4	10	0.20	24	0.14				0.68					0.68
EXTRACCION VE-24	16.00	10.00	1.00	0.81	Codo			16	10	0.81	24	1.07				5.03					5.03
EXTRACCION VE-24	16.00	10.00	1.00	0.81	Codo			16	10	0.81	24	1.07				5.03					5.03
EXTRACCION VE-24	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-24	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-24	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-24	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-24	6.00	14.00	1.00	0.30	Codo			6	14	0.30	24	0.31				1.45					1.45
EXTRACCION VE-24	6.00	14.00	1.00	0.30	Codo			6	14	0.30	24	0.31				1.45					1.45
EXTRACCION VE-24	6.00	14.00	1.00	0.30	Codo			6	14	0.30	24	0.31				1.45					1.45
EXTRACCION VE-24	6.00	14.00	1.00	0.30	Codo			6	14	0.30	24	0.31				1.45					1.45
EXTRACCION VE-24	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-24	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-24	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16

TABLA DE DATOS																					
																	CALIBRE				
DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	AISLAM ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-24	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-24	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-24	10.00	6.00	1.00	0.30	Transicion			10	6	0.30	24	0.24				1.14					1.14
EXTRACCION VE-24	14.00	8.00	1.00	0.30	Transicion			14	8	0.30	24	0.34				1.57					1.57
EXTRACCION VE-24	18.00	8.00	1.00	0.30	Transicion			18	8	0.30	24	0.40				1.86					1.86
EXTRACCION VE-24	16.00	8.00	1.00	0.30	Transicion			16	8	0.30	24	0.37				1.72					1.72
EXTRACCION VE-24	28.00	28.00	1.00	0.30	Transicion			28	28	0.30	24	0.85				4.00					4.00
EXTRACCION VE-24	26.00	10.00	1.00	0.30	Transicion			26	10	0.30	24	0.55				2.57					2.57
EXTRACCION VE-24	16.00	10.00	1.00	0.30	Transicion			16	10	0.30	24	0.40				1.86					1.86
EXTRACCION VE-24	14.00	6.00	1.00	0.30	Transicion			14	6	0.30	24	0.30				1.43					1.43
EXTRACCION VE-24	10.00	6.00	1.00	0.30	Transicion			10	6	0.30	24	0.24				1.14					1.14
EXTRACCION VE-24	10.00	6.00	1.00	0.30	Transicion			10	6	0.30	24	0.24				1.14					1.14
EXTRACCION VE-24	24.00	12.00	1.00	0.30	Transicion			24	12	0.30	24	0.55				2.57					2.57
EXTRACCION VE-24	24.00	12.00	1.00	0.30	Transicion redondo cuadrado			24	12	0.30	24	0.55				2.57					2.57
EXTRACCION VE-24	18.00	12.00	1.00	0.30	Transicion redondo cuadrado			18	12	0.30	24	0.46				2.14					2.14
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-24	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57

TABLA DE DATOS																					
DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	AISLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-25	24.00	12.00	1.00	1.22	Codo			24	12	1.22	24	2.23				10.46			10.46		
EXTRACCION VE-25	12.00	24.00	1.00	0.61	Codo			12	24	0.61	24	1.11				5.23			5.23		
EXTRACCION VE-25	12.00	24.00	1.00	0.61	Codo			12	24	0.61	24	1.11				5.23			5.23		
EXTRACCION VE-25	24.00	12.00	1.00	1.22	Codo			24	12	1.22	24	2.23				10.46			10.46		
EXTRACCION VE-25	12.00	24.00	1.00	0.61	Codo			12	24	0.61	24	1.11				5.23			5.23		
EXTRACCION VE-25	14.00	8.00	1.00	0.30	Transicion			14	8	0.30	24	0.34				1.57			1.57		
EXTRACCION VE-25	14.00	10.00	1.00	0.30	Transicion			14	10	0.30	24	0.37				1.72			1.72		
EXTRACCION VE-25	14.00	6.00	1.00	0.30	Transicion			14	6	0.30	24	0.30				1.43			1.43		
EXTRACCION VE-25	18.00	10.00	1.00	0.30	Transicion			18	10	0.30	24	0.43				2.00			2.00		
EXTRACCION VE-25	20.00	12.00	1.00	0.30	Transicion			20	12	0.30	24	0.49				2.29			2.29		
EXTRACCION VE-25	24.00	12.00	1.00	0.30	Transicion			24	12	0.30	24	0.55				2.57			2.57		
EXTRACCION VE-25	24.00	24.00	1.00	0.30	Transicion			24	24	0.30	24	0.73				3.43			3.43		
EXTRACCION VE-25	24.00	12.00	1.00	0.30	Transicion redondo cuadrado			24	12	0.30	24	0.55				2.57			2.57		
EXTRACCION VE-25	24.00	12.00	1.00	0.30	Transicion redondo cuadrado			24	12	0.30	24	0.55				2.57			2.57		
EXTRACCION VE-25	12.00	12.00	1.00	0.15	Zapato			12	12	0.15	24	0.18				0.86			0.86		
EXTRACCION VE-25	12.00	4.00	1.00	0.15	Zapato			12	4	0.15	24	0.12				0.57			0.57		
EXTRACCION VE-25	10.00	10.00	1.00	0.15	Zapato			10	10	0.15	24	0.15				0.71			0.71		
EXTRACCION VE-25	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57			0.57		
EXTRACCION VE-25	12.00	12.00	1.00	0.15	Zapato			12	12	0.15	24	0.18				0.86			0.86		
EXTRACCION VE-25	14.00	6.00	1.00	0.15	Zapato			14	6	0.15	24	0.15				0.71			0.71		
EXTRACCION VE-25	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57			0.57		
EXTRACCION VE-25	10.00	10.00	1.00	0.15	Zapato			10	10	0.15	24	0.15				0.71			0.71		
EXTRACCION VE-25	14.00	6.00	1.00	0.15	Zapato			14	6	0.15	24	0.15				0.71			0.71		
EXTRACCION VE-25	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57			0.57		
EXTRACCION VE-25	10.00	10.00	1.00	0.15	Zapato			10	10	0.15	24	0.15				0.71			0.71		
EXTRACCION VE-26	14.00	10.00	1.00	0.71	Codo			14	10	0.71	24	0.87				4.07			4.07		
EXTRACCION VE-26	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69			1.69		
EXTRACCION VE-26	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69			1.69		
EXTRACCION VE-26	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69			1.69		
EXTRACCION VE-26	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69			1.69		
EXTRACCION VE-26	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69			1.69		
EXTRACCION VE-26	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69			1.69		
EXTRACCION VE-26	20.00	10.00	1.00	1.02	Codo			20	10	1.02	24	1.55				7.26			7.26		
EXTRACCION VE-26	16.00	8.00	1.00	0.81	Codo			16	8	0.81	24	0.99				4.65			4.65		
EXTRACCION VE-26	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69			1.69		
EXTRACCION VE-26	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69			1.69		
EXTRACCION VE-26	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69			1.69		
EXTRACCION VE-26	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69			1.69		
EXTRACCION VE-26	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69			1.69		
EXTRACCION VE-26	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69			1.69		
EXTRACCION VE-26	12.00	24.00	1.00	0.61	Codo			12	24	0.61	24	1.11				5.23			5.23		
EXTRACCION VE-26	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69			1.69		
EXTRACCION VE-26	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69			1.69		
EXTRACCION VE-26	18.00	10.00	1.00	0.91	Codo			18	10	0.91	24	1.30				6.10			6.10		
EXTRACCION VE-26	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69			1.69		
EXTRACCION VE-26	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69			1.69		
EXTRACCION VE-26	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69			1.69		
EXTRACCION VE-26	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69			1.69		
EXTRACCION VE-26	16.00	32.00	1.00	0.81	Codo			16	32	0.81	22	1.98				11.14			11.14		
EXTRACCION VE-26	16.00	32.00	1.00	0.81	Codo			16	32	0.81	22	1.98				11.14			11.14		
EXTRACCION VE-26	32.00	16.00	1.00	1.63	Codo			32	16	1.63	22	3.96				22.28			22.28		
EXTRACCION VE-26	6.00	12.00	1.00	0.30	Codo			6	12	0.30	24	0.28				1.31			1.31		
EXTRACCION VE-26	6.00	12.00	1.00	0.30	Codo			6	12	0.30	24	0.28				1.31			1.31		
EXTRACCION VE-26	6.00	12.00	1.00	0.30	Codo			6	12	0.30	24	0.28				1.31			1.31		
EXTRACCION VE-26	10.00	6.00	1.00	0.30	Transicion			10	6	0.30	24	0.24				1.14			1.14		

TABLA DE DATOS																					
																	CALIBRE				
DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	AISLAM ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-26	8.00	8.00	1.00	0																	

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-28	12.00	6.00	1.00	0.61	Codo			12	6	0.61	24	0.56				2.61					2.61
EXTRACCION VE-28	12.00	8.00	1.00	0.61	Codo			12	8	0.61	24	0.62				2.90					2.90
EXTRACCION VE-28	12.00	8.00	1.00	0.61	Codo			12	8	0.61	24	0.62				2.90					2.90
EXTRACCION VE-28	8.00	12.00	1.00	0.41	Codo			8	12	0.41	24	0.41				1.94					1.94
EXTRACCION VE-28	8.00	12.00	1.00	0.41	Codo			8	12	0.41	24	0.41				1.94					1.94
EXTRACCION VE-28	8.00	12.00	1.00	0.41	Codo			8	12	0.41	24	0.41				1.94					1.94
EXTRACCION VE-28	12.00	6.00	1.00	0.30	Transicion			12	6	0.30	24	0.27				1.29					1.29
EXTRACCION VE-28	12.00	8.00	1.00	0.30	Transicion			12	8	0.30	24	0.30				1.43					1.43
EXTRACCION VE-28	21.00	21.00	1.00	0.30	Transicion			21	21	0.30	24	0.64				3.00					3.00
EXTRACCION VE-28	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-28	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-28	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-28	10.00	10.00	1.00	0.15	Zapato			10	10	0.15	24	0.15				0.71					0.71
EXTRACCION VE-29	12.00	8.00	1.00	0.61	Codo			12	8	0.61	24	0.62				2.90					2.90
EXTRACCION VE-29	12.00	8.00	1.00	0.61	Codo			12	8	0.61	24	0.62				2.90					2.90
EXTRACCION VE-29	8.00	12.00	1.00	0.41	Codo			8	12	0.41	24	0.41				1.94					1.94
EXTRACCION VE-29	8.00	12.00	1.00	0.41	Codo			8	12	0.41	24	0.41				1.94					1.94
EXTRACCION VE-29	8.00	12.00	1.00	0.41	Codo			8	12	0.41	24	0.41				1.94					1.94
EXTRACCION VE-29	12.00	8.00	1.00	0.30	Transicion			12	8	0.30	24	0.30				1.43					1.43
EXTRACCION VE-29	21.00	21.00	1.00	0.30	Transicion			21	21	0.30	24	0.64				3.00					3.00
EXTRACCION VE-29	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-29	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-29	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-29	10.00	10.00	1.00	0.15	Zapato			10	10	0.15	24	0.15				0.71					0.71
EXTRACCION VE-30	12.00	8.00	1.00	0.61	Codo			12	8	0.61	24	0.62				2.90					2.90
EXTRACCION VE-30	12.00	8.00	1.00	0.61	Codo			12	8	0.61	24	0.62				2.90					2.90
EXTRACCION VE-30	12.00	8.00	1.00	0.61	Codo			12	8	0.61	24	0.62				2.90					2.90
EXTRACCION VE-30	8.00	12.00	1.00	0.41	Codo			8	12	0.41	24	0.41				1.94					1.94
EXTRACCION VE-30	8.00	12.00	1.00	0.41	Codo			8	12	0.41	24	0.41				1.94					1.94
EXTRACCION VE-30	12.00	8.00	1.00	0.61	Codo			12	8	0.61	24	0.62				2.90					2.90
EXTRACCION VE-30	8.00	12.00	1.00	0.41	Codo			8	12	0.41	24	0.41				1.94					1.94
EXTRACCION VE-30	12.00	8.00	1.00	0.30	Transicion			12	8	0.30	24	0.30				1.43					1.43
EXTRACCION VE-30	21.00	21.00	1.00	0.30	Transicion			21	21	0.30	24	0.64				3.00					3.00
EXTRACCION VE-30	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-30	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-30	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-30	10.00	10.00	1.00	0.15	Zapato			10	10	0.15	24	0.15				0.71					0.71
EXTRACCION VE-30	10.00	10.00	1.00	0.15	Zapato			10	10	0.15	24	0.15				0.71					0.71
EXTRACCION VE-31	20.00	10.00	1.00	1.02	Codo			20	10	1.02	24	1.55				7.26					7.26
EXTRACCION VE-31	16.00	8.00	1.00	0.81	Codo			16	8	0.81	24	0.99				4.65					4.65
EXTRACCION VE-31	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-31	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-31	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-31	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-31	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-31	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-31	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-31	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-31	22.00	10.00	1.00	1.12	Codo			22	10	1.12	24	1.82				8.52					8.52
EXTRACCION VE-31	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-31	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-31	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-31	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-31	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-31	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-31	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-31	12.00	24.00	1.00	0.61	Codo			12	24	0.61	24	1.11				5.23					5.23
EXTRACCION VE-31	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-31	16.00	28.00	1.00	0.81	Codo			16	28	0.81	24	1.82				8.52					8.52
EXTRACCION VE-31	28.00	16.00	1.00	1.42	Codo			28	16	1.42	24	3.18				14.91					14.91

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-31	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-31	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-31	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-31	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-31	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-31	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-31	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-31	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-31	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-31	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-31	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-31	16.00	10.00	1.00	0.15	Zapato			16	10	0.15	24	0.20				0.93					0.93
EXTRACCION VE-31	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-31	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-31	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-31	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-31	12.00	20.00	1.00	0.15	Zapato			12	20	0.15	24	0.24				1.14					1.14
EXTRACCION VE-31	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-32	12.00	8.00	1.00	0.61	Codo			12	8	0.61	24	0.62				2.90					2.90
EXTRACCION VE-32	12.00	8.00	1.00	0.61	Codo			12	8	0.61	24	0.62				2.90					2.90
EXTRACCION VE-32	8.00	12.00	1.00	0.41	Codo			8	12	0.41	24	0.41				1.94					1.94
EXTRACCION VE-32	8.00	12.00	1.00	0.41	Codo			8	12	0.41	24	0.41				1.94					1.94
EXTRACCION VE-32	8.00	12.00	1.00	0.41	Codo			8	12	0.41	24	0.41				1.94					1.94
EXTRACCION VE-32	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-32	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-32	12.00	8.00	1.00	0.30	Transicion			12	8	0.30	24	0.30				1.43					1.43
EXTRACCION VE-32	21.00	21.00	1.00	0.30	Transicion			21	21	0.30	24	0.64				3.00					3.00
EXTRACCION VE-32	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-32	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-32	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-32	12.00	4.00	1.00	0.15	Zapato			12	4	0.15	24	0.12				0.57					0.57
EXTRACCION VE-32	10.00	10.00	1.00	0.15	Zapato			10	10	0.15	24	0.15				0.71					0.71
EXTRACCION VE-33	12.00	6.00	1.00	0.61	Codo			12	6	0.61	24	0.56				2.61					2.61
EXTRACCION VE-33	12.00	8.00	1.00	0.61	Codo			12	8	0.61	24	0.62				2.90					2.90
EXTRACCION VE-33	12.00	8.00	1.00	0.61	Codo			12	8	0.61	24	0.62				2.90					2.90
EXTRACCION VE-33	8.00	12.00	1.00	0.41	Codo			8	12	0.41	24	0.41				1.94					1.94
EXTRACCION VE-33	8.00	12.00	1.00	0.41	Codo			8	12	0.41	24	0.41				1.94					1.94
EXTRACCION VE-33	8.00	12.00	1.00	0.41	Codo			8	12	0.41	24	0.41				1.94					1.94
EXTRACCION VE-33	12.00	8.00	1.00	0.30	Transicion			12	8	0.30	24	0.30				1.43					1.43
EXTRACCION VE-33	12.00	6.00	1.00	0.30	Transicion			12	6	0.30	24	0.27				1.29					1.29
EXTRACCION VE-33	21.00	21.00	1.00	0.30	Transicion			21	21	0.30	24	0.64				3.00					3.00
EXTRACCION VE-33	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-33	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-33	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-33	10.00	10.00	1.00	0.15	Zapato			10	10	0.15	24	0.15				0.71					0.71
EXTRACCION VE-34	12.00	8.00	1.00	0.61	Codo			12	8	0.61	24	0.62				2.90					2.90
EXTRACCION VE-34	12.00	8.00	1.00	0.61	Codo			12	8	0.61	24	0.62				2.90					2.90
EXTRACCION VE-34	12.00	8.00	1.00	0.61	Codo			12	8	0.61	24	0.62				2.90					2.90
EXTRACCION VE-34	8.00	12.00	1.00	0.41	Codo			8	12	0.41	24	0.41				1.94					1.94
EXTRACCION VE-34	8.00	12.00	1.00	0.41	Codo			8	12	0.41	24	0.41				1.94					1.94
EXTRACCION VE-34	12.00	8.00	1.00	0.61	Codo			12	8	0.61	24	0.62				2.90					2.90
EXTRACCION VE-34	8.00	12.00	1.00	0.41	Codo			8	12	0.41	24	0.41				1.94					1.94
EXTRACCION VE-34	12.00	8.00	1.00	0.30	Transicion			12	8	0.30	24	0.30				1.43					1.43
EXTRACCION VE-34	21.00	21.00	1.00	0.30	Transicion			21	21	0.30	24	0.64				3.00					3.00
EXTRACCION VE-34	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-34	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-34	10.00	10.00	1.00	0.15	Zapato			10	10	0.15	24	0.15				0.71					0.71
EXTRACCION VE-34	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
EXTRACCION VE-35	10.00	4.00	1.00	0.51	Codo			10	4	0.51	24	0.36				1.69					1.69
EXTRACCION VE-35	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-35	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-35	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-35	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-35	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-35	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-35	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-35	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-35	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-35	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-35	10.00	6.00	1.00	0.51	Codo			10	6	0.51	24	0.41				1.94					1.94
EXTRACCION VE-35	6.00	10.00	1.00	0.30	Codo			6	10	0.30	24	0.25				1.16					1.16
EXTRACCION VE-35	10.00	6.00	1.00	0.30	Transicion			10	6	0.30	24	0.24				1.14					1.14
EXTRACCION VE-35	21.00	21.00	1.00	0.30	Transicion			21	21	0.30	24	0.64				3.00					3.00
EXTRACCION VE-35	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-35	10.00	4.00	1.00	0.15	Zapato			10	4	0.15	24	0.11				0.50					0.50
EXTRACCION VE-35	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
EXTRACCION VE-35	8.00	8.00	1.00	0.15	Zapato			8	8	0.15	24	0.12				0.57					0.57
RETORNO UFCO-01	14.00	6.00	1.00	0.71	Codo	E		14	6	0.71	24	0.72	0.87		0.87	3.39					3.39
RETORNO UFCO-01	14.00	6.00	1.00	0.71	Codo	E		14	6	0.71	24	0.72	0.87		0.87	3.39					3.39
RETORNO UFCO-01	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
RETORNO UFCO-01	6.00	14.00	1.00	0.15	Zapato	E		6	14	0.15	24	0.15	0.18		0.18	0.71					0.71
RETORNO UFCO-01	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UFCO-02	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UFCO-02	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UFCO-02	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UFCO-02	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UFCO-03	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UFCO-03	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UFCO-03	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UFCO-03	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UFCO-04	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UFCO-04	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UFCO-04	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UFCO-04	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UFCO-05	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UFCO-05	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UFCO-05	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UFCO-05	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UFCO-10	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UFCO-10	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UFCO-10	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UFCO-10	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UFCO-10	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UFCO-11	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UFCO-11	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UFCO-11	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UFCO-11	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UFCO-14	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UFCO-14	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UFCO-14	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UFCO-15	16.00	8.00	1.00	0.81	Codo	E		16	8	0.81	24	0.99	1.16		1.16	4.65					4.65
RETORNO UFCO-15	16.00	8.00	1.00	0.81	Codo	E		16	8	0.81	24	0.99	1.16		1.16	4.65					4.65
RETORNO UFCO-15	8.00	16.00	1.00	0.15	Zapato	E		8	16	0.15	24	0.18	0.21		0.21	0.86					0.86
RETORNO UFCO-15	14.00	14.00	1.00	0.15	Zapato	E		14	14	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UFCO-17	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UFCO-17	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UFCO-17	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UFCO-19	20.00	8.00	1.00	1.02	Codo	E		20	8	1.02	24	1.45	1.65		1.65	6.78					6.78

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
RETORNO UFCO-19	8.00	20.00	1.00	0.15	Zapato	E		8	20	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UFCO-19	16.00	16.00	1.00	0.15	Zapato	E		16	16	0.15	24	0.24	0.27		0.27	1.14					1.14
RETORNO UFCO-21	20.00	8.00	1.00	1.02	Codo	E		20	8	1.02	24	1.45	1.65		1.65	6.78					6.78
RETORNO UFCO-21	16.00	16.00	1.00	0.15	Zapato	E		16	16	0.15	24	0.24	0.27		0.27	1.14					1.14
RETORNO UFCO-21	8.00	20.00	1.00	0.15	Zapato	E		8	20	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UFCO-23	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UFCO-23	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UFCO-23	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UFCO-23	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UFCO-24	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UFCO-24	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UFCO-24	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UFCO-24	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UFCO-25	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UFCO-25	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UFCO-25	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UFCO-25	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UFCO-26	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UFCO-26	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UFCO-26	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UFCO-26	4.00	10.00	1.00	0.15	Zapato	E		4	10	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UMA-02	16.00	8.00	1.00	0.81	Codo	E		16	8	0.81	24	0.99	1.16		1.16	4.65					4.65
RETORNO UMA-02	34.00	24.00	1.00	0.30	Transicion	E		34	24	0.30	22	0.88	0.94		0.94	4.97				4.97	
RETORNO UMA-02	14.00	14.00	1.00	0.15	Zapato	E		14	14	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UMA-02	14.00	14.00	1.00	0.15	Zapato	E		14	14	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UMAE-01	18.00	10.00	1.00	0.91	Codo	E		18	10	0.91	24	1.30	1.49		1.49	6.10					6.10
RETORNO UMAE-01	10.00	20.00	1.00	0.51	Codo	E		10	20	0.51	24	0.77	0.88		0.88	3.63					3.63
RETORNO UMAE-01	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UMAE-01	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UMAE-01	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
RETORNO UMAE-01	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
RETORNO UMAE-01	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
RETORNO UMAE-01	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UMAE-01	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UMAE-01	10.00	20.00	1.00	0.51	Codo	E		10	20	0.51	24	0.77	0.88		0.88	3.63					3.63
RETORNO UMAE-01	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
RETORNO UMAE-01	14.00	22.00	1.00	0.71	Codo	E		14	22	0.71	24	1.30	1.45		1.45	6.10					6.10
RETORNO UMAE-01	12.00	22.00	1.00	0.61	Codo	E		12	22	0.61	24	1.05	1.18		1.18	4.94					4.94
RETORNO UMAE-01	12.00	22.00	1.00	0.61	Codo	E		12	22	0.61	24	1.05	1.18		1.18	4.94					4.94
RETORNO UMAE-01	22.00	12.00	1.00	1.12	Codo	E		22	12	1.12	24	1.93	2.16		2.16	9.05					9.05
RETORNO UMAE-01	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UMAE-01	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UMAE-01	14.00	22.00	1.00	0.71	Codo	E		14	22	0.71	24	1.30	1.45		1.45	6.10					6.10
RETORNO UMAE-01	22.00	14.00	1.00	1.12	Codo	E		22	14	1.12	24	2.04	2.27		2.27	9.59					9.59
RETORNO UMAE-01	22.00	14.00	1.00	1.12	Codo	E		22	14	1.12	24	2.04	2.27		2.27	9.59					9.59
RETORNO UMAE-01	14.00	22.00	1.00	0.71	Codo	E		14	22	0.71	24	1.30	1.45		1.45	6.10					6.10
RETORNO UMAE-01	20.00	10.00	1.00	0.30	Transicion	E		20	10	0.30	24	0.46	0.52		0.52	2.14					2.14
RETORNO UMAE-01	22.00	14.00	1.00	0.30	Transicion	E		22	14	0.30	24	0.55	0.61		0.61	2.57					2.57
RETORNO UMAE-01	61.00	12.00	1.00	0.30	Transicion	E		61	12	0.30	20	1.11	1.17		1.17	7.98			7.98		
RETORNO UMAE-01	14.00	6.00	1.00	0.30	Transicion	E		14	6	0.30	24	0.30	0.37		0.37	1.43					1.43
RETORNO UMAE-01	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-01	14.00	6.00	1.00	0.15	Zapato	E		14	6	0.15	24	0.15	0.18		0.18	0.71					0.71
RETORNO UMAE-01	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-01	14.00	14.00	1.00	0.15	Zapato	E		14	14	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UMAE-01	14.00	14.00	1.00	0.15	Zapato	E		14	14	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UMAE-01	14.00	14.00	1.00	0.15	Zapato	E		14	14	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UMAE-01	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UMAE-01	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-01	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
RETORNO UMAE-01	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-01	20.00	10.00	1.00	0.15	Zapato	E		20	10	0.15	24	0.23	0.26		0.26	1.07					1.07
RETORNO UMAE-01	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-02	16.00	10.00	1.00	0.81	Codo	E		16	10	0.81	24	1.07	1.24		1.24	5.03					5.03
RETORNO UMAE-02	16.00	10.00	1.00	0.81	Codo	E		16	10	0.81	24	1.07	1.24		1.24	5.03					5.03
RETORNO UMAE-02	10.00	16.00	1.00	0.51	Codo	E		10	16	0.51	24	0.67	0.77		0.77	3.15					3.15
RETORNO UMAE-02	36.00	12.00	1.00	0.30	Transicion	E		36	12	0.30	22	0.73	0.79		0.79	4.11			4.11		
RETORNO UMAE-02	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
RETORNO UMAE-02	14.00	14.00	1.00	0.15	Zapato	E		14	14	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UMAE-02	14.00	14.00	1.00	0.15	Zapato	E		14	14	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UMAE-03	16.00	6.00	1.00	0.81	Codo	E		16	6	0.81	24	0.91	1.07		1.07	4.26					4.26
RETORNO UMAE-03	16.00	6.00	1.00	0.81	Codo	E		16	6	0.81	24	0.91	1.07		1.07	4.26					4.26
RETORNO UMAE-03	16.00	6.00	1.00	0.81	Codo	E		16	6	0.81	24	0.91	1.07		1.07	4.26					4.26
RETORNO UMAE-03	16.00	6.00	1.00	0.81	Codo	E		16	6	0.81	24	0.91	1.07		1.07	4.26					4.26
RETORNO UMAE-03	6.00	16.00	1.00	0.30	Codo	E		6	16	0.30	24	0.34	0.40		0.40	1.60					1.60
RETORNO UMAE-03	24.00	6.00	1.00	0.30	Transicion	E		24	6	0.30	24	0.46	0.52		0.52	2.14					2.14
RETORNO UMAE-03	14.00	14.00	1.00	0.15	Zapato	E		14	14	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UMAE-04	30.00	14.00	1.00	1.52	Codo	E		30	14	1.52	24	3.41	3.72		3.72	15.98					15.98
RETORNO UMAE-04	30.00	14.00	1.00	1.52	Codo	E		30	14	1.52	24	3.41	3.72		3.72	15.98					15.98
RETORNO UMAE-04	14.00	30.00	1.00	0.71	Codo	E		14	30	0.71	24	1.59	1.73		1.73	7.46					7.46
RETORNO UMAE-04	20.00	14.00	1.00	1.02	Codo	E		20	14	1.02	24	1.75	1.96		1.96	8.23					8.23
RETORNO UMAE-04	16.00	6.00	1.00	0.81	Codo	E		16	6	0.81	24	0.91	1.07		1.07	4.26					4.26
RETORNO UMAE-04	16.00	6.00	1.00	0.81	Codo	E		16	6	0.81	24	0.91	1.07		1.07	4.26					4.26
RETORNO UMAE-04	14.00	30.00	1.00	0.71	Codo	E		14	30	0.71	24	1.59	1.73		1.73	7.46					7.46
RETORNO UMAE-04	20.00	8.00	1.00	1.02	Codo	E		20	8	1.02	24	1.45	1.65		1.65	6.78					6.78
RETORNO UMAE-04	14.00	30.00	1.00	0.71	Codo	E		14	30	0.71	24	1.59	1.73		1.73	7.46					7.46
RETORNO UMAE-04	8.00	20.00	1.00	0.41	Codo	E		8	20	0.41	24	0.58	0.66		0.66	2.71					2.71
RETORNO UMAE-04	8.00	20.00	1.00	0.41	Codo	E		8	20	0.41	24	0.58	0.66		0.66	2.71					2.71
RETORNO UMAE-04	20.00	8.00	1.00	1.02	Codo	E		20	8	1.02	24	1.45	1.65		1.65	6.78					6.78
RETORNO UMAE-04	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
RETORNO UMAE-04	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
RETORNO UMAE-04	8.00	16.00	1.00	0.41	Codo	E		8	16	0.41	24	0.50	0.58		0.58	2.32					2.32
RETORNO UMAE-04	16.00	8.00	1.00	0.81	Codo	E		16	8	0.81	24	0.99	1.16		1.16	4.65					4.65
RETORNO UMAE-04	8.00	16.00	1.00	0.41	Codo	E		8	16	0.41	24	0.50	0.58		0.58	2.32					2.32
RETORNO UMAE-04	14.00	30.00	1.00	0.71	Codo	E		14	30	0.71	24	1.59	1.73		1.73	7.46					7.46
RETORNO UMAE-04	14.00	30.00	1.00	0.71	Codo	E		14	30	0.71	24	1.59	1.73		1.73	7.46					7.46
RETORNO UMAE-04	30.00	14.00	1.00	1.52	Codo	E		30	14	1.52	24	3.41	3.72		3.72	15.98					15.98
RETORNO UMAE-04	14.00	30.00	1.00	0.71	Codo	E		14	30	0.71	24	1.59	1.73		1.73	7.46					7.46
RETORNO UMAE-04	6.00	16.00	1.00	0.30	Codo	E		6	16	0.30	24	0.34	0.40		0.40	1.60					1.60
RETORNO UMAE-04	6.00	16.00	1.00	0.30	Codo	E		6	16	0.30	24	0.34	0.40		0.40	1.60					1.60
RETORNO UMAE-04	6.00	16.00	1.00	0.30	Codo	E		6	16	0.30	24	0.34	0.40		0.40	1.60					1.60
RETORNO UMAE-04	10.00	20.00	1.00	0.51	Codo	E		10	20	0.51	24	0.77	0.88		0.88	3.63					3.63
RETORNO UMAE-04	10.00	20.00	1.00	0.51	Codo	E		10	20	0.51	24	0.77	0.88		0.88	3.63					3.63
RETORNO UMAE-04	20.00	10.00	1.00	1.02	Codo	E		20	10	1.02	24	1.55	1.75		1.75	7.26					7.26
RETORNO UMAE-04	10.00	20.00	1.00	0.51	Codo	E		10	20	0.51	24	0.77	0.88		0.88	3.63					3.63
RETORNO UMAE-04	30.00	14.00	1.00	1.52	Codo	E		30	14	1.52	24	3.41	3.72		3.72	15.98					15.98
RETORNO UMAE-04	14.00	30.00	1.00	0.71	Codo	E		14	30	0.71	24	1.59	1.73		1.73	7.46					7.46
RETORNO UMAE-04	10.00	20.00	1.00	0.51	Codo	E		10	20	0.51	24	0.77	0.88		0.88	3.63					3.63
RETORNO UMAE-04	10.00	20.00	1.00	0.51	Codo	E		10	20	0.51	24	0.77	0.88		0.88	3.63					3.63
RETORNO UMAE-04	10.00	20.00	1.00	0.51	Codo	E		10	20	0.51	24	0.77	0.88		0.88	3.63					3.63
RETORNO UMAE-04	10.00	20.00	1.00	0.51	Codo	E		10	20	0.51	24	0.77	0.88		0.88	3.63					3.63
RETORNO UMAE-04	10.00	20.00	1.00	0.51	Codo	E		10	20	0.51	24	0.77	0.88		0.88	3.63					3.63
RETORNO UMAE-04	24.00	14.00	1.00	0.30	Transicion	E		24	14	0.30	24	0.58	0.64		0.64	2.72					2.72
RETORNO UMAE-04	30.00	14.00	1.00	0.30	Transicion	E		30	14	0.30	24	0.67	0.73		0.73	3.14					3.14
RETORNO UMAE-04	20.00	8.00	1.00	0.30	Transicion	E		20	8	0.30	24	0.43	0.49		0.49	2.00					2.00
RETORNO UMAE-04	16.00	8.00	1.00	0.30	Transicion	E		16	8	0.30	24	0.37	0.43		0.43	1.72					1.72
RETORNO UMAE-04	74.00	18.00	1.00	0.30	Transicion	E		74	18	0.30	20	1.40	1.46		1.46	10.05			10.05		
RETORNO UMAE-04	20.00	14.00	1.00	0.30	Transicion	E		20	14	0.30	24	0.52	0.58		0.58	2.43					2.43

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
RETORNO UMAE-04	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-04	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-04	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-04	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-04	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UMAE-04	10.00	10.00	1.00	0.15	Zapato	E		10	10	0.15	24	0.15	0.18		0.18	0.71					0.71
RETORNO UMAE-04	14.00	14.00	1.00	0.15	Zapato	E		14	14	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UMAE-04	14.00	14.00	1.00	0.15	Zapato	E		14	14	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UMAE-04	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-04	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-04	16.00	16.00	1.00	0.15	Zapato	E		16	16	0.15	24	0.24	0.27		0.27	1.14					1.14
RETORNO UMAE-04	16.00	16.00	1.00	0.15	Zapato	E		16	16	0.15	24	0.24	0.27		0.27	1.14					1.14
RETORNO UMAE-04	10.00	10.00	1.00	0.15	Zapato	E		10	10	0.15	24	0.15	0.18		0.18	0.71					0.71
RETORNO UMAE-04	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UMAE-04	12.00	4.00	1.00	0.15	Zapato	E		12	4	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UMAE-04	20.00	8.00	1.00	0.15	Zapato	E		20	8	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UMAE-04	16.00	8.00	1.00	0.15	Zapato	E		16	8	0.15	24	0.18	0.21		0.21	0.86					0.86
RETORNO UMAE-05	12.00	8.00	1.00	0.61	Calsoncillo	E		12	8	0.61	24	0.62	0.74		0.74	2.90					2.90
RETORNO UMAE-05	10.00	8.00	1.00	0.51	Calsoncillo	E		10	8	0.51	24	0.46	0.57		0.57	2.18					2.18
RETORNO UMAE-05	22.00	16.00	1.00	1.12	Codo	E		22	16	1.12	24	2.16	2.38		2.38	10.12					10.12
RETORNO UMAE-05	22.00	16.00	1.00	1.12	Codo	E		22	16	1.12	24	2.16	2.38		2.38	10.12					10.12
RETORNO UMAE-05	16.00	22.00	1.00	0.81	Codo	E		16	22	0.81	24	1.57	1.73		1.73	7.36					7.36
RETORNO UMAE-05	10.00	8.00	1.00	0.51	Codo	E		10	8	0.51	24	0.46	0.57		0.57	2.18					2.18
RETORNO UMAE-05	10.00	8.00	1.00	0.51	Codo	E		10	8	0.51	24	0.46	0.57		0.57	2.18					2.18
RETORNO UMAE-05	22.00	16.00	1.00	1.12	Codo	E		22	16	1.12	24	2.16	2.38		2.38	10.12					10.12
RETORNO UMAE-05	22.00	16.00	1.00	1.12	Codo	E		22	16	1.12	24	2.16	2.38		2.38	10.12					10.12
RETORNO UMAE-05	16.00	22.00	1.00	0.81	Codo	E		16	22	0.81	24	1.57	1.73		1.73	7.36					7.36
RETORNO UMAE-05	16.00	22.00	1.00	0.81	Codo	E		16	22	0.81	24	1.57	1.73		1.73	7.36					7.36
RETORNO UMAE-05	22.00	16.00	1.00	1.12	Codo	E		22	16	1.12	24	2.16	2.38		2.38	10.12					10.12
RETORNO UMAE-05	16.00	22.00	1.00	0.81	Codo	E		16	22	0.81	24	1.57	1.73		1.73	7.36					7.36
RETORNO UMAE-05	8.00	16.00	1.00	0.41	Codo	E		8	16	0.41	24	0.50	0.58		0.58	2.32					2.32
RETORNO UMAE-05	8.00	16.00	1.00	0.41	Codo	E		8	16	0.41	24	0.50	0.58		0.58	2.32					2.32
RETORNO UMAE-05	8.00	18.00	1.00	0.41	Codo	E		8	18	0.41	24	0.54	0.62		0.62	2.52					2.52
RETORNO UMAE-05	18.00	8.00	1.00	0.91	Codo	E		18	8	0.91	24	1.21	1.39		1.39	5.66					5.66
RETORNO UMAE-05	8.00	18.00	1.00	0.41	Codo	E		8	18	0.41	24	0.54	0.62		0.62	2.52					2.52
RETORNO UMAE-05	6.00	14.00	1.00	0.30	Codo	E		6	14	0.30	24	0.31	0.37		0.37	1.45					1.45
RETORNO UMAE-05	8.00	12.00	1.00	0.41	Codo	E		8	12	0.41	24	0.41	0.50		0.50	1.94					1.94
RETORNO UMAE-05	8.00	12.00	1.00	0.41	Codo	E		8	12	0.41	24	0.41	0.50		0.50	1.94					1.94
RETORNO UMAE-05	6.00	14.00	1.00	0.30	Codo	E		6	14	0.30	24	0.31	0.37		0.37	1.45					1.45
RETORNO UMAE-05	22.00	16.00	1.00	1.12	Codo	E		22	16	1.12	24	2.16	2.38		2.38	10.12					10.12
RETORNO UMAE-05	22.00	16.00	1.00	1.12	Codo	E		22	16	1.12	24	2.16	2.38		2.38	10.12					10.12
RETORNO UMAE-05	16.00	22.00	1.00	0.81	Codo	E		16	22	0.81	24	1.57	1.73		1.73	7.36					7.36
RETORNO UMAE-05	16.00	22.00	1.00	0.81	Codo	E		16	22	0.81	24	1.57	1.73		1.73	7.36					7.36
RETORNO UMAE-05	22.00	16.00	1.00	1.12	Codo	E		22	16	1.12	24	2.16	2.38		2.38	10.12					10.12
RETORNO UMAE-05	16.00	22.00	1.00	0.81	Codo	E		16	22	0.81	24	1.57	1.73		1.73	7.36					7.36
RETORNO UMAE-05	12.00	8.00	1.00	0.30	Transicion	E		12	8	0.30	24	0.30	0.37		0.37	1.43					1.43
RETORNO UMAE-05	10.00	8.00	1.00	0.30	Transicion	E		10	8	0.30	24	0.27	0.34		0.34	1.29					1.29
RETORNO UMAE-05	22.00	14.00	1.00	0.30	Transicion	E		22	14	0.30	24	0.55	0.61		0.61	2.57					2.57
RETORNO UMAE-05	22.00	16.00	1.00	0.30	Transicion	E		22	16	0.30	24	0.58	0.64		0.64	2.72					2.72
RETORNO UMAE-05	12.00	8.00	1.00	0.30	Transicion	E		12	8	0.30	24	0.30	0.37		0.37	1.43					1.43
RETORNO UMAE-05	61.00	12.00	1.00	0.30	Transicion	E		61	12	0.30	20	1.11	1.17		1.17	7.98			7.98		
RETORNO UMAE-05	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-05	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-05	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-05	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
RETORNO UMAE-05	10.00	10.00	1.00	0.15	Zapato	E		10	10	0.15	24	0.15	0.18		0.18	0.71					0.71
RETORNO UMAE-05	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-05	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-05	16.00	16.00	1.00	0.15	Zapato	E		16	16	0.15	24	0.24	0.27		0.27	1.14					1.14
RETORNO UMAE-05	16.00	16.00	1.00	0.15	Zapato	E		16	16	0.15	24	0.24	0.27		0.27	1.14					1.14
RETORNO UMAE-05	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
RETORNO UMAE-05	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-05	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UMAE-05	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-05	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-05	14.00	6.00	1.00	0.15	Zapato	E		14	6	0.15	24	0.15	0.18		0.18	0.71					0.71
RETORNO UMAE-05	12.00	8.00	1.00	0.15	Zapato	E		12	8	0.15	24	0.15	0.18		0.18	0.71					0.71
RETORNO UMAE-05	18.00	8.00	1.00	0.15	Zapato	E		18	8	0.15	24	0.20	0.23		0.23	0.93					0.93
RETORNO UMAE-09	6.00	14.00	1.00	0.30	Codo	E		6	14	0.30	24	0.31	0.37		0.37	1.45					1.45
RETORNO UMAE-09	14.00	6.00	1.00	0.71	Codo	E		14	6	0.71	24	0.72	0.87		0.87	3.39					3.39
RETORNO UMAE-09	6.00	14.00	1.00	0.30	Codo	E		6	14	0.30	24	0.31	0.37		0.37	1.45					1.45
RETORNO UMAE-09	6.00	14.00	1.00	0.30	Codo	E		6	14	0.30	24	0.31	0.37		0.37	1.45					1.45
RETORNO UMAE-09	6.00	14.00	1.00	0.30	Codo	E		6	14	0.30	24	0.31	0.37		0.37	1.45					1.45
RETORNO UMAE-09	12.00	18.00	1.00	0.61	Codo	E		12	18	0.61	24	0.93	1.05		1.05	4.36					4.36
RETORNO UMAE-09	18.00	12.00	1.00	0.91	Codo	E		18	12	0.91	24	1.39	1.58		1.58	6.54					6.54
RETORNO UMAE-09	12.00	18.00	1.00	0.61	Codo	E		12	18	0.61	24	0.93	1.05		1.05	4.36					4.36
RETORNO UMAE-09	18.00	12.00	1.00	0.91	Codo	E		18	12	0.91	24	1.39	1.58		1.58	6.54					6.54
RETORNO UMAE-09	12.00	18.00	1.00	0.61	Codo	E		12	18	0.61	24	0.93	1.05		1.05	4.36					4.36
RETORNO UMAE-09	16.00	8.00	1.00	0.30	Transicion	E		16	8	0.30	24	0.37	0.43		0.43	1.72					1.72
RETORNO UMAE-09	18.00	10.00	1.00	0.30	Transicion	E		18	10	0.30	24	0.43	0.49		0.49	2.00					2.00
RETORNO UMAE-09	18.00	12.00	1.00	0.30	Transicion	E		18	12	0.30	24	0.46	0.52		0.52	2.14					2.14
RETORNO UMAE-09	36.00	12.00	1.00	0.30	Transicion	E		36	12	0.30	22	0.73	0.79		0.79	4.11				4.11	
RETORNO UMAE-09	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
RETORNO UMAE-09	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
RETORNO UMAE-09	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
RETORNO UMAE-09	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
RETORNO UMAE-09	14.00	6.00	1.00	0.15	Zapato	E		14	6	0.15	24	0.15	0.18		0.18	0.71					0.71
RETORNO UMAE-09	14.00	6.00	1.00	0.15	Zapato	E		14	6	0.15	24	0.15	0.18		0.18	0.71					0.71
RETORNO UMAE-09	14.00	6.00	1.00	0.15	Zapato	E		14	6	0.15	24	0.15	0.18		0.18	0.71					0.71
RETORNO UMAE-10	6.00	14.00	1.00	0.30	Codo	E		6	14	0.30	24	0.31	0.37		0.37	1.45					1.45
RETORNO UMAE-10	14.00	6.00	1.00	0.71	Codo	E		14	6	0.71	24	0.72	0.87		0.87	3.39					3.39
RETORNO UMAE-10	6.00	14.00	1.00	0.30	Codo	E		6	14	0.30	24	0.31	0.37		0.37	1.45					1.45
RETORNO UMAE-10	6.00	14.00	1.00	0.30	Codo	E		6	14	0.30	24	0.31	0.37		0.37	1.45					1.45
RETORNO UMAE-10	12.00	18.00	1.00	0.61	Codo	E		12	18	0.61	24	0.93	1.05		1.05	4.36					4.36
RETORNO UMAE-10	18.00	12.00	1.00	0.91	Codo	E		18	12	0.91	24	1.39	1.58		1.58	6.54					6.54
RETORNO UMAE-10	18.00	12.00	1.00	0.91	Codo	E		18	12	0.91	24	1.39	1.58		1.58	6.54					6.54
RETORNO UMAE-10	12.00	18.00	1.00	0.61	Codo	E		12	18	0.61	24	0.93	1.05		1.05	4.36					4.36
RETORNO UMAE-10	12.00	18.00	1.00	0.61	Codo	E		12	18	0.61	24	0.93	1.05		1.05	4.36					4.36
RETORNO UMAE-10	16.00	8.00	1.00	0.30	Transicion	E		16	8	0.30	24	0.37	0.43		0.43	1.72					1.72
RETORNO UMAE-10	18.00	10.00	1.00	0.30	Transicion	E		18	10	0.30	24	0.43	0.49		0.49	2.00					2.00
RETORNO UMAE-10	18.00	12.00	1.00	0.30	Transicion	E		18	12	0.30	24	0.46	0.52		0.52	2.14					2.14
RETORNO UMAE-10	36.00	12.00	1.00	0.30	Transicion	E		36	12	0.30	22	0.73	0.79		0.79	4.11				4.11	
RETORNO UMAE-10	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
RETORNO UMAE-10	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
RETORNO UMAE-10	14.00	6.00	1.00	0.15	Zapato	E		14	6	0.15	24	0.15	0.18		0.18	0.71					0.71
RETORNO UMAE-10	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
RETORNO UMAE-10	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
RETORNO UMAE-10	14.00	6.00	1.00	0.15	Zapato	E		14	6	0.15	24	0.15	0.18		0.18	0.71					0.71
RETORNO UMAE-10	14.00	6.00	1.00	0.15	Zapato	E		14	6	0.15	24	0.15	0.18		0.18	0.71					0.71
RETORNO UMAE-13	16.00	40.00	1.00	0.81	Codo	E		16	40	0.81	22	2.31	2.48		2.48	12.99				12.99	
RETORNO UMAE-13	6.00	16.00	1.00	0.30	Codo	E		6	16	0.30	24	0.34	0.40		0.40	1.60					1.60
RETORNO UMAE-13	16.00	6.00	1.00	0.81	Codo	E		16	6	0.81	24	0.91	1.07		1.07	4.26					4.26
RETORNO UMAE-13	6.00	16.00	1.00	0.30	Codo	E		6	16	0.30	24	0.34	0.40		0.40	1.60					1.60

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
RETORNO UMAE-13	14.00	28.00	1.00	0.71	Codo	E		14	28	0.71	24	1.52	1.66		1.66	7.12					7.12
RETORNO UMAE-13	14.00	28.00	1.00	0.71	Codo	E		14	28	0.71	24	1.52	1.66		1.66	7.12					7.12
RETORNO UMAE-13	12.00	26.00	1.00	0.61	Codo	E		12	26	0.61	24	1.18	1.30		1.30	5.52					5.52
RETORNO UMAE-13	12.00	26.00	1.00	0.61	Codo	E		12	26	0.61	24	1.18	1.30		1.30	5.52					5.52
RETORNO UMAE-13	16.00	12.00	1.00	0.81	Codo	E		16	12	0.81	24	1.16	1.32		1.32	5.42					5.42
RETORNO UMAE-13	12.00	16.00	1.00	0.61	Codo	E		12	16	0.61	24	0.87	0.99		0.99	4.07					4.07
RETORNO UMAE-13	12.00	16.00	1.00	0.61	Codo	E		12	16	0.61	24	0.87	0.99		0.99	4.07					4.07
RETORNO UMAE-13	12.00	16.00	1.00	0.61	Codo	E		12	16	0.61	24	0.87	0.99		0.99	4.07					4.07
RETORNO UMAE-13	12.00	16.00	1.00	0.61	Codo	E		12	16	0.61	24	0.87	0.99		0.99	4.07					4.07
RETORNO UMAE-13	4.00	12.00	1.00	0.20	Codo	E		4	12	0.20	24	0.17	0.21		0.21	0.77					0.77
RETORNO UMAE-13	4.00	12.00	1.00	0.20	Codo	E		4	12	0.20	24	0.17	0.21		0.21	0.77					0.77
RETORNO UMAE-13	16.00	12.00	1.00	0.81	Codo	E		16	12	0.81	24	1.16	1.32		1.32	5.42					5.42
RETORNO UMAE-13	12.00	26.00	1.00	0.61	Codo	E		12	26	0.61	24	1.18	1.30		1.30	5.52					5.52
RETORNO UMAE-13	16.00	40.00	1.00	0.81	Codo	E		16	40	0.81	22	2.31	2.48		2.48	12.99				12.99	
RETORNO UMAE-13	40.00	16.00	1.00	2.03	Codo	E		40	16	2.03	22	5.78	6.19		6.19	32.49				32.49	
RETORNO UMAE-13	16.00	40.00	1.00	0.81	Codo	E		16	40	0.81	22	2.31	2.48		2.48	12.99				12.99	
RETORNO UMAE-13	12.00	26.00	1.00	0.61	Codo	E		12	26	0.61	24	1.18	1.30		1.30	5.52					5.52
RETORNO UMAE-13	26.00	12.00	1.00	1.32	Codo	E		26	12	1.32	24	2.55	2.82		2.82	11.96					11.96
RETORNO UMAE-13	26.00	12.00	1.00	1.32	Codo	E		26	12	1.32	24	2.55	2.82		2.82	11.96					11.96
RETORNO UMAE-13	14.00	28.00	1.00	0.71	Codo	E		14	28	0.71	24	1.52	1.66		1.66	7.12					7.12
RETORNO UMAE-13	28.00	14.00	1.00	1.42	Codo	E		28	14	1.42	24	3.03	3.32		3.32	14.23					14.23
RETORNO UMAE-13	14.00	28.00	1.00	0.71	Codo	E		14	28	0.71	24	1.52	1.66		1.66	7.12					7.12
RETORNO UMAE-13	16.00	8.00	1.00	0.30	Transicion	E		16	8	0.30	24	0.37	0.43		0.43	1.72					1.72
RETORNO UMAE-13	32.00	14.00	1.00	0.30	Transicion	E		32	14	0.30	22	0.70	0.76		0.76	3.94				3.94	
RETORNO UMAE-13	22.00	10.00	1.00	0.30	Transicion	E		22	10	0.30	24	0.49	0.55		0.55	2.29					2.29
RETORNO UMAE-13	28.00	14.00	1.00	0.30	Transicion	E		28	14	0.30	24	0.64	0.70		0.70	3.00					3.00
RETORNO UMAE-13	16.00	12.00	1.00	0.30	Transicion	E		16	12	0.30	24	0.43	0.49		0.49	2.00					2.00
RETORNO UMAE-13	26.00	12.00	1.00	0.30	Transicion	E		26	12	0.30	24	0.58	0.64		0.64	2.72					2.72
RETORNO UMAE-13	40.00	16.00	1.00	0.30	Transicion	E		40	16	0.30	22	0.85	0.91		0.91	4.80				4.80	
RETORNO UMAE-13	24.00	61.00	1.00	0.30	Transicion	E		24	61	0.30	20	1.30	1.36		1.36	9.29			9.29		
RETORNO UMAE-13	14.00	14.00	1.00	0.15	Zapato	E		14	14	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UMAE-13	14.00	14.00	1.00	0.15	Zapato	E		14	14	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UMAE-13	14.00	14.00	1.00	0.15	Zapato	E		14	14	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UMAE-13	16.00	6.00	1.00	0.15	Zapato	E		16	6	0.15	24	0.17	0.20		0.20	0.79					0.79
RETORNO UMAE-13	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-13	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-13	10.00	10.00	1.00	0.15	Zapato	E		10	10	0.15	24	0.15	0.18		0.18	0.71					0.71
RETORNO UMAE-13	10.00	10.00	1.00	0.15	Zapato	E		10	10	0.15	24	0.15	0.18		0.18	0.71					0.71
RETORNO UMAE-13	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-13	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
RETORNO UMAE-13	10.00	10.00	1.00	0.15	Zapato	E		10	10	0.15	24	0.15	0.18		0.18	0.71					0.71
RETORNO UMAE-13	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
RETORNO UMAE-13	14.00	14.00	1.00	0.15	Zapato	E		14	14	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UMAE-13	14.00	14.00	1.00	0.15	Zapato	E		14	14	0.15	24	0.21	0.24		0.24	1.00					1.00
RETORNO UMAE-13	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UMAE-13	12.00	4.00	1.00	0.15	Zapato	E		12	4	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-13	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-13	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-13	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UMAE-13	16.00	6.00	1.00	0.15	Zapato	E		16	6	0.15	24	0.17	0.20		0.20	0.79					0.79
RETORNO UMAE-13	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
RETORNO UMAE-13	16.00	16.00	1.00	0.15	Zapato	E		16	16	0.15	24	0.24	0.27		0.27	1.14					1.14
RETORNO UMAE-13	32.00	14.00	1.00	0.15	Zapato	E		32	14	0.15	22	0.35	0.38		0.38	1.97				1.97	
RETORNO UMAE-14	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UMAE-14	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UMAE-14	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UMAE-14	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UMAE-14	14.00	8.00	1.00	0.71	Codo	E		14	8	0.71	24	0.79	0.94		0.94	3.73					3.73
RETORNO UMAE-14	12.00	4.00	1.00	0.61	Codo	E		12	4	0.61	24	0.50	0.62		0.62	2.32					2.32

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
RETORNO UMAE-14	8.00	14.00	1.00	0.41	Codo	E		8	14	0.41	24	0.45	0.54		0.54	2.13					2.13
RETORNO UMAE-14	8.00	14.00	1.00	0.41	Codo	E		8	14	0.41	24	0.45	0.54		0.54	2.13					2.13
RETORNO UMAE-14	14.00	8.00	1.00	0.71	Codo	E		14	8	0.71	24	0.79	0.94		0.94	3.73					3.73
RETORNO UMAE-14	8.00	14.00	1.00	0.41	Codo	E		8	14	0.41	24	0.45	0.54		0.54	2.13					2.13
RETORNO UMAE-14	12.00	6.00	1.00	0.30	Transicion	E		12	6	0.30	24	0.27	0.34		0.34	1.29					1.29
RETORNO UMAE-14	14.00	8.00	1.00	0.30	Transicion	E		14	8	0.30	24	0.34	0.40		0.40	1.57					1.57
RETORNO UMAE-14	12.00	36.00	1.00	0.30	Transicion	E		12	36	0.30	22	0.73	0.79		0.79	4.11			4.11		
RETORNO UMAE-14	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-14	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-14	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UMAE-14	10.00	10.00	1.00	0.15	Zapato	E		10	10	0.15	24	0.15	0.18		0.18	0.71					0.71
RETORNO UMAE-14	12.00	4.00	1.00	0.15	Zapato	E		12	4	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-16	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UMAE-16	24.00	12.00	1.00	1.22	Codo	E		24	12	1.22	24	2.23	2.48		2.48	10.46					10.46
RETORNO UMAE-16	24.00	12.00	1.00	1.22	Codo	E		24	12	1.22	24	2.23	2.48		2.48	10.46					10.46
RETORNO UMAE-16	24.00	12.00	1.00	1.22	Codo	E		24	12	1.22	24	2.23	2.48		2.48	10.46					10.46
RETORNO UMAE-16	12.00	24.00	1.00	0.61	Codo	E		12	24	0.61	24	1.11	1.24		1.24	5.23					5.23
RETORNO UMAE-16	24.00	12.00	1.00	1.22	Codo	E		24	12	1.22	24	2.23	2.48		2.48	10.46					10.46
RETORNO UMAE-16	12.00	24.00	1.00	0.61	Codo	E		12	24	0.61	24	1.11	1.24		1.24	5.23					5.23
RETORNO UMAE-16	12.00	24.00	1.00	0.61	Codo	E		12	24	0.61	24	1.11	1.24		1.24	5.23					5.23
RETORNO UMAE-16	12.00	24.00	1.00	0.61	Codo	E		12	24	0.61	24	1.11	1.24		1.24	5.23					5.23
RETORNO UMAE-16	24.00	12.00	1.00	0.30	Transicion	E		24	12	0.30	24	0.55	0.61		0.61	2.57					2.57
RETORNO UMAE-16	61.00	18.00	1.00	0.30	Transicion	E		61	18	0.30	20	1.20	1.26		1.26	8.63		8.63			
RETORNO UMAE-16	20.00	20.00	1.00	0.15	Zapato	E		20	20	0.15	24	0.30	0.34		0.34	1.43					1.43
RETORNO UMAE-16	20.00	20.00	1.00	0.15	Zapato	E		20	20	0.15	24	0.30	0.34		0.34	1.43					1.43
RETORNO UMAE-16	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-16	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-16	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-16	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UMAE-16	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UMAE-17	16.00	10.00	1.00	0.81	Codo	E		16	10	0.81	24	1.07	1.24		1.24	5.03					5.03
RETORNO UMAE-17	16.00	10.00	1.00	0.81	Codo	E		16	10	0.81	24	1.07	1.24		1.24	5.03					5.03
RETORNO UMAE-17	16.00	10.00	1.00	0.81	Codo	E		16	10	0.81	24	1.07	1.24		1.24	5.03					5.03
RETORNO UMAE-17	16.00	10.00	1.00	0.81	Codo	E		16	10	0.81	24	1.07	1.24		1.24	5.03					5.03
RETORNO UMAE-17	24.00	10.00	1.00	1.22	Codo	E		24	10	1.22	24	2.11	2.35		2.35	9.88					9.88
RETORNO UMAE-17	24.00	10.00	1.00	1.22	Codo	E		24	10	1.22	24	2.11	2.35		2.35	9.88					9.88
RETORNO UMAE-17	10.00	24.00	1.00	0.51	Codo	E		10	24	0.51	24	0.88	0.98		0.98	4.12					4.12
RETORNO UMAE-17	24.00	10.00	1.00	0.30	Transicion	E		24	10	0.30	24	0.52	0.58		0.58	2.43					2.43
RETORNO UMAE-17	49.00	18.00	1.00	0.30	Transicion	E		49	18	0.30	22	1.02	1.08		1.08	5.74			5.74		
RETORNO UMAE-17	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57					0.57
RETORNO UMAE-17	16.00	16.00	1.00	0.15	Zapato	E		16	16	0.15	24	0.24	0.27		0.27	1.14					1.14
RETORNO UMAE-17	16.00	16.00	1.00	0.15	Zapato	E		16	16	0.15	24	0.24	0.27		0.27	1.14					1.14
RETORNO UMAE-17	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
RETORNO UMAE-18	10.00	6.00	1.00	0.51	Codo	E		10	6	0.51	24	0.41	0.52		0.52	1.94					1.94
RETORNO UMAE-18	10.00	6.00	1.00	0.51	Codo	E		10	6	0.51	24	0.41	0.52		0.52	1.94					1.94
RETORNO UMAE-18	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
RETORNO UMAE-18	18.00	10.00	1.00	0.91	Codo	E		18	10	0.91	24	1.30	1.49		1.49	6.10					6.10
RETORNO UMAE-18	18.00	10.00	1.00	0.91	Codo	E		18	10	0.91	24	1.30	1.49		1.49	6.10					6.10
RETORNO UMAE-18	10.00	20.00	1.00	0.51	Codo	E		10	20	0.51	24	0.77	0.88		0.88	3.63					3.63
RETORNO UMAE-18	20.00	10.00	1.00	1.02	Codo	E		20	10	1.02	24	1.55	1.75		1.75	7.26					7.26
RETORNO UMAE-18	10.00	20.00	1.00	0.51	Codo	E		10	20	0.51	24	0.77	0.88		0.88	3.63					3.63
RETORNO UMAE-18	20.00	10.00	1.00	1.02	Codo	E		20	10	1.02	24	1.55	1.75		1.75	7.26					7.26
RETORNO UMAE-18	10.00	20.00	1.00	0.51	Codo	E		10	20	0.51	24	0.77	0.88		0.88	3.63					3.63
RETORNO UMAE-18	10.00	8.00	1.00	0.30	Transicion	E		10	8	0.30	24	0.27	0.34		0.34	1.29					1.29
RETORNO UMAE-18	12.00	8.00	1.00	0.30	Transicion	E		12	8	0.30	24	0.30	0.37		0.37	1.43					1.43
RETORNO UMAE-18	16.00	8.00	1.00	0.30	Transicion	E		16	8	0.30	24	0.37	0.43		0.43	1.72					1.72
RETORNO UMAE-18	18.00	10.00	1.00	0.30	Transicion	E		18	10	0.30	24	0.43	0.49		0.49	2.00					2.00

TABLA DE DATOS																						
DUCTO		MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	AISLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																		CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																						
RETORNO UMAE-18	20.00	10.00	1.00	0.30	Transicion	E			20	10	0.30	24	0.46	0.52		0.52	2.14				2.14	
RETORNO UMAE-18	36.00	12.00	1.00	0.30	Transicion	E			36	12	0.30	22	0.73	0.79		0.79	4.11			4.11		
RETORNO UMAE-18	8.00	8.00	1.00	0.15	Zapato	E			8	8	0.15	24	0.12	0.15		0.15	0.57				0.57	
RETORNO UMAE-18	8.00	8.00	1.00	0.15	Zapato	E			8	8	0.15	24	0.12	0.15		0.15	0.57				0.57	
RETORNO UMAE-18	8.00	8.00	1.00	0.15	Zapato	E			8	8	0.15	24	0.12	0.15		0.15	0.57				0.57	
RETORNO UMAE-18	8.00	8.00	1.00	0.15	Zapato	E			8	8	0.15	24	0.12	0.15		0.15	0.57				0.57	
RETORNO UMAE-18	10.00	4.00	1.00	0.15	Zapato	E			10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
RETORNO UMAE-18	8.00	8.00	1.00	0.15	Zapato	E			8	8	0.15	24	0.12	0.15		0.15	0.57				0.57	
RETORNO UMAE-18	8.00	8.00	1.00	0.15	Zapato	E			8	8	0.15	24	0.12	0.15		0.15	0.57				0.57	
RETORNO UMAE-18	8.00	8.00	1.00	0.15	Zapato	E			8	8	0.15	24	0.12	0.15		0.15	0.57				0.57	
RETORNO UMAE-18	10.00	6.00	1.00	0.15	Zapato	E			10	6	0.15	24	0.12	0.15		0.15	0.57				0.57	
RETORNO UMAE-18	10.00	4.00	1.00	0.15	Zapato	E			10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
RETORNO UMAE-18	10.00	4.00	1.00	0.15	Zapato	E			10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
RETORNO UMAE-18	8.00	8.00	1.00	0.15	Zapato	E			8	8	0.15	24	0.12	0.15		0.15	0.57				0.57	
RETORNO UMAE-20	22.00	10.00	1.00	1.12	Codo	E			22	10	1.12	24	1.82	2.04		2.04	8.52				8.52	
RETORNO UMAE-20	10.00	22.00	1.00	0.51	Codo	E			10	22	0.51	24	0.83	0.93		0.93	3.87				3.87	
RETORNO UMAE-20	10.00	4.00	1.00	0.51	Codo	E			10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
RETORNO UMAE-20	10.00	6.00	1.00	0.51	Codo	E			10	6	0.51	24	0.41	0.52		0.52	1.94				1.94	
RETORNO UMAE-20	10.00	4.00	1.00	0.51	Codo	E			10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
RETORNO UMAE-20	4.00	10.00	1.00	0.20	Codo	E			4	10	0.20	24	0.14	0.19		0.19	0.68				0.68	
RETORNO UMAE-20	4.00	10.00	1.00	0.20	Codo	E			4	10	0.20	24	0.14	0.19		0.19	0.68				0.68	
RETORNO UMAE-20	4.00	10.00	1.00	0.20	Codo	E			4	10	0.20	24	0.14	0.19		0.19	0.68				0.68	
RETORNO UMAE-20	10.00	4.00	1.00	0.51	Codo	E			10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
RETORNO UMAE-20	4.00	10.00	1.00	0.20	Codo	E			4	10	0.20	24	0.14	0.19		0.19	0.68				0.68	
RETORNO UMAE-20	10.00	22.00	1.00	0.51	Codo	E			10	22	0.51	24	0.83	0.93		0.93	3.87				3.87	
RETORNO UMAE-20	10.00	6.00	1.00	0.51	Codo	E			10	6	0.51	24	0.41	0.52		0.52	1.94				1.94	
RETORNO UMAE-20	10.00	4.00	1.00	0.51	Codo	E			10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
RETORNO UMAE-20	8.00	10.00	1.00	0.41	Codo	E			8	10	0.41	24	0.37	0.45		0.45	1.74				1.74	
RETORNO UMAE-20	8.00	10.00	1.00	0.41	Codo	E			8	10	0.41	24	0.37	0.45		0.45	1.74				1.74	
RETORNO UMAE-20	4.00	10.00	1.00	0.20	Codo	E			4	10	0.20	24	0.14	0.19		0.19	0.68				0.68	
RETORNO UMAE-20	10.00	4.00	1.00	0.51	Codo	E			10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
RETORNO UMAE-20	4.00	10.00	1.00	0.20	Codo	E			4	10	0.20	24	0.14	0.19		0.19	0.68				0.68	
RETORNO UMAE-20	10.00	4.00	1.00	0.51	Codo	E			10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
RETORNO UMAE-20	14.00	6.00	1.00	0.71	Codo	E			14	6	0.71	24	0.72	0.87		0.87	3.39				3.39	
RETORNO UMAE-20	10.00	4.00	1.00	0.51	Codo	E			10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
RETORNO UMAE-20	10.00	4.00	1.00	0.51	Codo	E			10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
RETORNO UMAE-20	10.00	6.00	1.00	0.51	Codo	E			10	6	0.51	24	0.41	0.52		0.52	1.94				1.94	
RETORNO UMAE-20	6.00	10.00	1.00	0.30	Codo	E			6	10	0.30	24	0.25	0.31		0.31	1.16				1.16	
RETORNO UMAE-20	10.00	8.00	1.00	0.51	Codo	E			10	8	0.51	24	0.46	0.57		0.57	2.18				2.18	
RETORNO UMAE-20	10.00	6.00	1.00	0.51	Codo	E			10	6	0.51	24	0.41	0.52		0.52	1.94				1.94	
RETORNO UMAE-20	6.00	10.00	1.00	0.30	Codo	E			6	10	0.30	24	0.25	0.31		0.31	1.16				1.16	
RETORNO UMAE-20	6.00	10.00	1.00	0.30	Codo	E			6	10	0.30	24	0.25	0.31		0.31	1.16				1.16	
RETORNO UMAE-20	10.00	4.00	1.00	0.51	Codo	E			10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
RETORNO UMAE-20	10.00	4.00	1.00	0.51	Codo	E			10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
RETORNO UMAE-20	10.00	4.00	1.00	0.51	Codo	E			10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
RETORNO UMAE-20	4.00	10.00	1.00	0.20	Codo	E			4	10	0.20	24	0.14	0.19		0.19	0.68				0.68	
RETORNO UMAE-20	4.00	10.00	1.00	0.20	Codo	E			4	10	0.20	24	0.14	0.19		0.19	0.68				0.68	
RETORNO UMAE-20	4.00	10.00	1.00	0.20	Codo	E			4	10	0.20	24	0.14	0.19		0.19	0.68				0.68	
RETORNO UMAE-20	14.00	6.00	1.00	0.71	Codo	E			14	6	0.71	24	0.72	0.87		0.87	3.39				3.39	
RETORNO UMAE-20	4.00	10.00	1.00	0.20	Codo	E			4	10	0.20	24	0.14	0.19		0.19	0.68				0.68	
RETORNO UMAE-20	10.00	4.00	1.00	0.51	Codo	E			10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
RETORNO UMAE-20	10.00	4.00	1.00	0.51	Codo	E			10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
RETORNO UMAE-20	10.00	8.00	1.00	0.30	Transicion	E			10	8	0.30	24	0.27	0.34		0.34	1.29				1.29	
RETORNO UMAE-20	14.00	6.00	1.00	0.30	Transicion	E			14	6	0.30	24	0.30	0.37		0.37	1.43				1.43	
RETORNO UMAE-20	10.00	6.00	1.00	0.30	Transicion	E			10	6	0.30	24	0.24	0.30		0.30	1.14				1.14	

TABLA DE DATOS																					
DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	AISLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UFCO-17	40.00	12.00	1.00	0.30	Transicion	E		40	12	0.30	22	0.79	0.85		0.85	4.45			4.45		
SUMINISTRO UFCO-17	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57				0.57	
SUMINISTRO UFCO-19	40.00	12.00	1.00	0.30	Transicion	E		40	12	0.30	22	0.79	0.85		0.85	4.45			4.45		
SUMINISTRO UFCO-19	16.00	16.00	1.00	0.15	Zapato	E		16	16	0.15	24	0.24	0.27		0.27	1.14				1.14	
SUMINISTRO UFCO-21	40.00	12.00	1.00	0.30	Transicion	E		40	12	0.30	22	0.79	0.85		0.85	4.45			4.45		
SUMINISTRO UFCO-21	16.00	16.00	1.00	0.15	Zapato	E		16	16	0.15	24	0.24	0.27		0.27	1.14				1.14	
SUMINISTRO UFCO-23	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
SUMINISTRO UFCO-23	40.00	12.00	1.00	0.30	Transicion	E		40	12	0.30	22	0.79	0.85		0.85	4.45			4.45		
SUMINISTRO UFCO-23	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57				0.57	
SUMINISTRO UFCO-24	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
SUMINISTRO UFCO-24	40.00	12.00	1.00	0.30	Transicion	E		40	12	0.30	22	0.79	0.85		0.85	4.45			4.45		
SUMINISTRO UFCO-24	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57				0.57	
SUMINISTRO UFCO-25	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
SUMINISTRO UFCO-25	40.00	12.00	1.00	0.30	Transicion	E		40	12	0.30	22	0.79	0.85		0.85	4.45			4.45		
SUMINISTRO UFCO-25	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57				0.57	
SUMINISTRO UFCO-26	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
SUMINISTRO UFCO-26	40.00	12.00	1.00	0.30	Transicion	E		40	12	0.30	22	0.79	0.85		0.85	4.45			4.45		
SUMINISTRO UFCO-26	8.00	8.00	1.00	0.15	Zapato	E		8	8	0.15	24	0.12	0.15		0.15	0.57				0.57	
SUMINISTRO UMA-02	16.00	12.00	1.00	0.81	Codo	E		16	12	0.81	24	1.16	1.32		1.32	5.42				5.42	
SUMINISTRO UMA-02	14.00	8.00	1.00	0.30	Transicion	E		14	8	0.30	24	0.34	0.40		0.40	1.57				1.57	
SUMINISTRO UMA-02	14.00	8.00	1.00	0.30	Transicion	E		14	8	0.30	24	0.34	0.40		0.40	1.57				1.57	
SUMINISTRO UMA-02	16.00	12.00	1.00	0.30	Transicion	E		16	12	0.30	24	0.43	0.49		0.49	2.00				2.00	
SUMINISTRO UMA-02	10.00	10.00	1.00	0.15	Zapato	E		10	10	0.15	24	0.15	0.18		0.18	0.71				0.71	
SUMINISTRO UMA-02	10.00	10.00	1.00	0.15	Zapato	E		10	10	0.15	24	0.15	0.18		0.18	0.71				0.71	
SUMINISTRO UMA-02	10.00	10.00	1.00	0.15	Zapato	E		10	10	0.15	24	0.15	0.18		0.18	0.71				0.71	
SUMINISTRO UMA-02	14.00	8.00	1.00	0.15	Zapato	E		14	8	0.15	24	0.17	0.20		0.20	0.79				0.79	
SUMINISTRO UMA-02	14.00	8.00	1.00	0.15	Zapato	E		14	8	0.15	24	0.17	0.20		0.20	0.79				0.79	
SUMINISTRO UMAE-01	16.00	10.00	1.00	0.81	Calsoncillo	E		16	10	0.81	24	1.07	1.24		1.24	5.03				5.03	
SUMINISTRO UMAE-01	10.00	10.00	1.00	0.51	Calsoncillo	E		10	10	0.51	24	0.52	0.62		0.62	2.42				2.42	
SUMINISTRO UMAE-01	12.00	6.00	1.00	0.61	Codo	E		12	6	0.61	24	0.56	0.68		0.68	2.61				2.61	
SUMINISTRO UMAE-01	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
SUMINISTRO UMAE-01	10.00	6.00	1.00	0.51	Codo	E		10	6	0.51	24	0.41	0.52		0.52	1.94				1.94	
SUMINISTRO UMAE-01	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
SUMINISTRO UMAE-01	14.00	6.00	1.00	0.71	Codo	E		14	6	0.71	24	0.72	0.87		0.87	3.39				3.39	
SUMINISTRO UMAE-01	14.00	26.00	1.00	0.71	Codo	E		14	26	0.71	24	1.45	1.59		1.59	6.78				6.78	
SUMINISTRO UMAE-01	14.00	26.00	1.00	0.71	Codo	E		14	26	0.71	24	1.45	1.59		1.59	6.78				6.78	
SUMINISTRO UMAE-01	14.00	26.00	1.00	0.71	Codo	E		14	26	0.71	24	1.45	1.59		1.59	6.78				6.78	
SUMINISTRO UMAE-01	14.00	26.00	1.00	0.71	Codo	E		14	26	0.71	24	1.45	1.59		1.59	6.78				6.78	
SUMINISTRO UMAE-01	12.00	6.00	1.00	0.30	Transicion	E		12	6	0.30	24	0.27	0.34		0.34	1.29				1.29	
SUMINISTRO UMAE-01	12.00	6.00	1.00	0.30	Transicion	E		12	6	0.30	24	0.27	0.34		0.34	1.29				1.29	
SUMINISTRO UMAE-01	12.00	6.00	1.00	0.30	Transicion	E		12	6	0.30	24	0.27	0.34		0.34	1.29				1.29	
SUMINISTRO UMAE-01	12.00	6.00	1.00	0.30	Transicion	E		12	6	0.30	24	0.27	0.34		0.34	1.29				1.29	
SUMINISTRO UMAE-01	12.00	10.00	1.00	0.30	Transicion	E		12	10	0.30	24	0.34	0.40		0.40	1.57				1.57	
SUMINISTRO UMAE-01	10.00	10.00	1.00	0.30	Transicion	E		10	10	0.30	24	0.30	0.37		0.37	1.43				1.43	
SUMINISTRO UMAE-01	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14				1.14	
SUMINISTRO UMAE-01	12.00	6.00	1.00	0.30	Transicion	E		12	6	0.30	24	0.27	0.34		0.34	1.29				1.29	
SUMINISTRO UMAE-01	24.00	12.00	1.00	0.30	Transicion	E		24	12	0.30	24	0.55	0.61		0.61	2.57				2.57	
SUMINISTRO UMAE-01	14.00	6.00	1.00	0.30	Transicion	E		14	6	0.30	24	0.30	0.37		0.37	1.43				1.43	
SUMINISTRO UMAE-01	26.00	10.00	1.00	0.30	Transicion	E		26	10	0.30	24	0.55	0.61		0.61	2.57				2.57	
SUMINISTRO UMAE-01	16.00	10.00	1.00	0.30	Transicion	E		16	10	0.30	24	0.40	0.46		0.46	1.86				1.86	
SUMINISTRO UMAE-01	26.00	14.00	1.00	0.30	Transicion	E		26	14	0.30	24	0.61	0.67		0.67	2.86				2.86	
SUMINISTRO UMAE-01	61.00	30.00	1.00	0.30	Transicion	E		61	30	0.30	20	1.39	1.45		1.45	9.94		9.94			
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-01	12.00	6.00	1.00	0.15	Zapato	E		12	6	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-01	12.00	6.00	1.00	0.15	Zapato	E		12	6	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-01	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-01	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-01	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-01	24.00	12.00	1.00	0.15	Zapato	E		24	12	0.15	24	0.27	0.30		0.30	1.29					1.29
SUMINISTRO UMAE-01	12.00	6.00	1.00	0.15	Zapato	E		12	6	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-01	26.00	10.00	1.00	0.15	Zapato	E		26	10	0.15	24	0.27	0.30		0.30	1.29					1.29
SUMINISTRO UMAE-01	10.00	6.00	1.00	0.15	Zapato	E		10	6	0.15	24	0.12	0.15		0.15	0.57					0.57
SUMINISTRO UMAE-01	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-01	12.00	6.00	1.00	0.15	Zapato	E		12	6	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-02	14.00	6.00	1.00	0.71	Codo	E		14	6	0.71	24	0.72	0.87		0.87	3.39					3.39
SUMINISTRO UMAE-02	14.00	6.00	1.00	0.71	Codo	E		14	6	0.71	24	0.72	0.87		0.87	3.39					3.39
SUMINISTRO UMAE-02	12.00	20.00	1.00	0.61	Codo	E		12	20	0.61	24	0.99	1.11		1.11	4.65					4.65
SUMINISTRO UMAE-02	20.00	12.00	1.00	1.02	Codo	E		20	12	1.02	24	1.65	1.86		1.86	7.75					7.75
SUMINISTRO UMAE-02	12.00	20.00	1.00	0.61	Codo	E		12	20	0.61	24	0.99	1.11		1.11	4.65					4.65
SUMINISTRO UMAE-02	12.00	20.00	1.00	0.61	Codo	E		12	20	0.61	24	0.99	1.11		1.11	4.65					4.65
SUMINISTRO UMAE-02	20.00	12.00	1.00	1.02	Codo	E		20	12	1.02	24	1.65	1.86		1.86	7.75					7.75
SUMINISTRO UMAE-02	12.00	20.00	1.00	0.61	Codo	E		12	20	0.61	24	0.99	1.11		1.11	4.65					4.65
SUMINISTRO UMAE-02	16.00	10.00	1.00	0.30	Transicion	E		16	10	0.30	24	0.40	0.46		0.46	1.86					1.86
SUMINISTRO UMAE-02	20.00	12.00	1.00	0.30	Transicion	E		20	12	0.30	24	0.49	0.55		0.55	2.29					2.29
SUMINISTRO UMAE-02	36.00	24.00	1.00	0.30	Transicion	E		36	24	0.30	22	0.91	0.98		0.98	5.14				5.14	
SUMINISTRO UMAE-02	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-02	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-02	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-02	12.00	6.00	1.00	0.15	Zapato	E		12	6	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-02	12.00	6.00	1.00	0.15	Zapato	E		12	6	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-02	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-02	12.00	6.00	1.00	0.15	Zapato	E		12	6	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-02	12.00	6.00	1.00	0.15	Zapato	E		12	6	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-03	10.00	6.00	1.00	0.51	Codo	E		10	6	0.51	24	0.41	0.52		0.52	1.94					1.94
SUMINISTRO UMAE-03	10.00	6.00	1.00	0.51	Codo	E		10	6	0.51	24	0.41	0.52		0.52	1.94					1.94
SUMINISTRO UMAE-03	12.00	10.00	1.00	0.61	Codo	E		12	10	0.61	24	0.68	0.81		0.81	3.20					3.20
SUMINISTRO UMAE-03	12.00	10.00	1.00	0.61	Codo	E		12	10	0.61	24	0.68	0.81		0.81	3.20					3.20
SUMINISTRO UMAE-03	10.00	12.00	1.00	0.51	Codo	E		10	12	0.51	24	0.57	0.67		0.67	2.66					2.66
SUMINISTRO UMAE-03	12.00	10.00	1.00	0.61	Codo	E		12	10	0.61	24	0.68	0.81		0.81	3.20					3.20
SUMINISTRO UMAE-03	10.00	12.00	1.00	0.51	Codo	E		10	12	0.51	24	0.57	0.67		0.67	2.66					2.66
SUMINISTRO UMAE-03	10.00	8.00	1.00	0.30	Transicion	E		10	8	0.30	24	0.27	0.34		0.34	1.29					1.29
SUMINISTRO UMAE-03	12.00	10.00	1.00	0.30	Transicion	E		12	10	0.30	24	0.34	0.40		0.40	1.57					1.57
SUMINISTRO UMAE-03	24.00	18.00	1.00	0.30	Transicion	E		24	18	0.30	24	0.64	0.70		0.70	3.00					3.00
SUMINISTRO UMAE-03	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-03	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-03	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-03	10.00	6.00	1.00	0.15	Zapato	E		10	6	0.15	24	0.12	0.15		0.15	0.57					0.57

TABLA DE DATOS

																	CALIBRE				
DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-03	10.00	6.00	1.00	0.15	Zapato	E		10	6	0.15	24	0.12	0.15		0.15	0.57					0.57
SUMINISTRO UMAE-04	32.00	18.00	1.00	1.63	Codo	E		32	18	1.63	22	4.13	4.46		4.46	23.21				23.21	
SUMINISTRO UMAE-04	18.00	32.00	1.00	0.91	Codo	E		18	32	0.91	22	2.32	2.51		2.51	13.05				13.05	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-04	28.00	16.00	1.00	1.42	Codo	E		28	16	1.42	24	3.18	3.47		3.47	14.91					14.91
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-04	16.00	10.00	1.00	0.81	Codo	E		16	10	0.81	24	1.07	1.24		1.24	5.03					5.03
SUMINISTRO UMAE-04	32.00	18.00	1.00	1.63	Codo	E		32	18	1.63	22	4.13	4.46		4.46	23.21				23.21	
SUMINISTRO UMAE-04	18.00	32.00	1.00	0.91	Codo	E		18	32	0.91	22	2.32	2.51		2.51	13.05				13.05	
SUMINISTRO UMAE-04	8.00	10.00	1.00	0.41	Codo	E		8	10	0.41	24	0.37	0.45		0.45	1.74					1.74
SUMINISTRO UMAE-04	32.00	18.00	1.00	1.63	Codo	E		32	18	1.63	22	4.13	4.46		4.46	23.21				23.21	
SUMINISTRO UMAE-04	18.00	32.00	1.00	0.91	Codo	E		18	32	0.91	22	2.32	2.51		2.51	13.05				13.05	
SUMINISTRO UMAE-04	8.00	10.00	1.00	0.41	Codo	E		8	10	0.41	24	0.37	0.45		0.45	1.74					1.74
SUMINISTRO UMAE-04	8.00	10.00	1.00	0.41	Codo	E		8	10	0.41	24	0.37	0.45		0.45	1.74					1.74
SUMINISTRO UMAE-04	10.00	18.00	1.00	0.51	Codo	E		10	18	0.51	24	0.72	0.83		0.83	3.39					3.39
SUMINISTRO UMAE-04	10.00	18.00	1.00	0.51	Codo	E		10	18	0.51	24	0.72	0.83		0.83	3.39					3.39
SUMINISTRO UMAE-04	26.00	12.00	1.00	1.32	Codo	E		26	12	1.32	24	2.55	2.82		2.82	11.96					11.96
SUMINISTRO UMAE-04	26.00	12.00	1.00	1.32	Codo	E		26	12	1.32	24	2.55	2.82		2.82	11.96					11.96
SUMINISTRO UMAE-04	10.00	24.00	1.00	0.51	Codo	E		10	24	0.51	24	0.88	0.98		0.98	4.12					4.12
SUMINISTRO UMAE-04	10.00	24.00	1.00	0.51	Codo	E		10	24	0.51	24	0.88	0.98		0.98	4.12					4.12
SUMINISTRO UMAE-04	10.00	24.00	1.00	0.51	Codo	E		10	24	0.51	24	0.88	0.98		0.98	4.12					4.12
SUMINISTRO UMAE-04	18.00	32.00	1.00	0.91	Codo	E		18	32	0.91	22	2.32	2.51		2.51	13.05				13.05	
SUMINISTRO UMAE-04	32.00	18.00	1.00	1.63	Codo	E		32	18	1.63	22	4.13	4.46		4.46	23.21				23.21	
SUMINISTRO UMAE-04	18.00	32.00	1.00	0.91	Codo	E		18	32	0.91	22	2.32	2.51		2.51	13.05				13.05	
SUMINISTRO UMAE-04	18.00	32.00	1.00	0.91	Codo	E		18	32	0.91	22	2.32	2.51		2.51	13.05				13.05	
SUMINISTRO UMAE-04	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14					1.14
SUMINISTRO UMAE-04	18.00	8.00	1.00	0.30	Transicion	E		18	8	0.30	24	0.40	0.46		0.46	1.86					1.86
SUMINISTRO UMAE-04	18.00	8.00	1.00	0.30	Transicion	E		18	8	0.30	24	0.40	0.46		0.46	1.86					1.86
SUMINISTRO UMAE-04	16.00	10.00	1.00	0.30	Transicion	E		16	10	0.30	24	0.40	0.46		0.46	1.86					1.86
SUMINISTRO UMAE-04	16.00	10.00	1.00	0.30	Transicion	E		16	10	0.30	24	0.40	0.46		0.46	1.86					1.86
SUMINISTRO UMAE-04	14.00	8.00	1.00	0.30	Transicion	E		14	8	0.30	24	0.34	0.40		0.40	1.57					1.57
SUMINISTRO UMAE-04	32.00	18.00	1.00	0.30	Transicion	E		32	18	0.30	22	0.76	0.82		0.82	4.28				4.28	
SUMINISTRO UMAE-04	28.00	16.00	1.00	0.30	Transicion	E		28	16	0.30	24	0.67	0.73		0.73	3.14					3.14
SUMINISTRO UMAE-04	18.00	10.00	1.00	0.30	Transicion	E		18	10	0.30	24	0.43	0.49		0.49	2.00					2.00
SUMINISTRO UMAE-04	10.00	8.00	1.00	0.30	Transicion	E		10	8	0.30	24	0.27	0.34		0.34	1.29					1.29
SUMINISTRO UMAE-04	20.00	10.00	1.00	0.30	Transicion	E		20	10	0.30	24	0.46	0.52		0.52	2.14					2.14
SUMINISTRO UMAE-04	26.00	12.00	1.00	0.30	Transicion	E		26	12	0.30	24	0.58	0.64		0.64	2.72					2.72
SUMINISTRO UMAE-04	74.00	37.00	1.00	0.30	Transicion	E		74	37	0.30	20	1.69	1.75		1.75	12.13			12.13		
SUMINISTRO UMAE-04	12.00	8.00	1.00	0.30	Transicion	E		12	8	0.30	24	0.30	0.37		0.37	1.43					1.43
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24										

TABLA DE DATOS																					
DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86				0.86	
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-04	14.00	4.00	1.00	0.15	Zapato	E		14	4	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-04	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86				0.86	
SUMINISTRO UMAE-04	12.00	6.00	1.00	0.15	Zapato	E		12	6	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-04	12.00	8.00	1.00	0.15	Zapato	E		12	8	0.15	24	0.15	0.18		0.18	0.71				0.71	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	12.00	4.00	1.00	0.15	Zapato	E		12	4	0.15	24	0.12	0.15		0.15	0.57				0.57	
SUMINISTRO UMAE-04	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86				0.86	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	18.00	8.00	1.00	0.15	Zapato	E		18	8	0.15	24	0.20	0.23		0.23	0.93				0.93	
SUMINISTRO UMAE-04	18.00	8.00	1.00	0.15	Zapato	E		18	8	0.15	24	0.20	0.23		0.23	0.93				0.93	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	20.00	10.00	1.00	0.15	Zapato	E		20	10	0.15	24	0.23	0.26		0.26	1.07				1.07	
SUMINISTRO UMAE-04	10.00	8.00	1.00	0.15	Zapato	E		10	8	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-04	16.00	10.00	1.00	0.15	Zapato	E		16	10	0.15	24	0.20	0.23		0.23	0.93				0.93	
SUMINISTRO UMAE-05	30.00	16.00	1.00	1.52	Codo	E		30	16	1.52	24	3.56	3.87		3.87	16.70				16.70	
SUMINISTRO UMAE-05	30.00	16.00	1.00	1.52	Codo	E		30	16	1.52	24	3.56	3.87		3.87	16.70				16.70	
SUMINISTRO UMAE-05	16.00	30.00	1.00	0.81	Codo	E		16	30	0.81	24	1.90	2.06		2.06	8.91				8.91	
SUMINISTRO UMAE-05	16.00	30.00	1.00	0.81	Codo	E		16	30	0.81	24	1.90	2.06		2.06	8.91				8.91	
SUMINISTRO UMAE-05	30.00	16.00	1.00	1.52	Codo	E		30	16	1.52	24	3.56	3.87		3.87	16.70				16.70	
SUMINISTRO UMAE-05	30.00	16.00	1.00	1.52	Codo	E		30	16	1.52	24	3.56	3.87		3.87	16.70				16.70	
SUMINISTRO UMAE-05	30.00	16.00	1.00	1.52	Codo	E		30	16	1.52	24	3.56	3.87		3.87	16.70				16.70	
SUMINISTRO UMAE-05	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
SUMINISTRO UMAE-05	12.00	8.00	1.00	0.61	Codo	E		12	8	0.61	24	0.62	0.74		0.74	2.90				2.90	
SUMINISTRO UMAE-05	10.00	6.00	1.00	0.51	Codo	E		10	6	0.51	24	0.41	0.52		0.52	1.94				1.94	
SUMINISTRO UMAE-05	12.00	6.00	1.00	0.61	Codo	E		12	6	0.61	24	0.56	0.68		0.68	2.61				2.61	
SUMINISTRO UMAE-05	30.00	16.00	1.00	1.52	Codo	E		30	16	1.52	24	3.56	3.87		3.87	16.70				16.70	
SUMINISTRO UMAE-05	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	

TABLA DE DATOS																					
																	CALIBRE				
DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-05	14.00	10.00	1.00	0.15	Zapato	E		14	10	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-05	12.00	6.00	1.00	0.15	Zapato	E		12	6	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-05	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-05	14.00	4.00	1.00	0.15	Zapato	E		14	4	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-05	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-05	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-05	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-05	14.00	8.00	1.00	0.15	Zapato	E		14	8	0.15	24	0.17	0.20		0.20	0.79					0.79
SUMINISTRO UMAE-05	14.00	8.00	1.00	0.15	Zapato	E		14	8	0.15	24	0.17	0.20		0.20	0.79					0.79
SUMINISTRO UMAE-05	18.00	10.00	1.00	0.15	Zapato	E		18	10	0.15	24	0.21	0.24		0.24	1.00					1.00
SUMINISTRO UMAE-05	10.00	6.00	1.00	0.15	Zapato	E		10	6	0.15	24	0.12	0.15		0.15	0.57					0.57
SUMINISTRO UMAE-09	12.00	14.00	1.00	0.61	Codo	E		12	14	0.61	24	0.81	0.93		0.93	3.78					3.78
SUMINISTRO UMAE-09	16.00	16.00	1.00	0.81	Codo	E		16	16	0.81	24	1.32	1.49		1.49	6.20					6.20
SUMINISTRO UMAE-09	14.00	12.00	1.00	0.71	Codo	E		14	12	0.71	24	0.94	1.08		1.08	4.41					4.41
SUMINISTRO UMAE-09	14.00	12.00	1.00	0.71	Codo	E		14	12	0.71	24	0.94	1.08		1.08	4.41					4.41
SUMINISTRO UMAE-09	14.00	12.00	1.00	0.71	Codo	E		14	12	0.71	24	0.94	1.08		1.08	4.41					4.41
SUMINISTRO UMAE-09	16.00	16.00	1.00	0.81	Codo	E		16	16	0.81	24	1.32	1.49		1.49	6.20					6.20
SUMINISTRO UMAE-09	16.00	16.00	1.00	0.81	Codo	E		16	16	0.81	24	1.32	1.49		1.49	6.20					6.20
SUMINISTRO UMAE-09	16.00	16.00	1.00	0.81	Codo	E		16	16	0.81	24	1.32	1.49		1.49	6.20					6.20
SUMINISTRO UMAE-09	16.00	16.00	1.00	0.81	Codo	E		16	16	0.81	24	1.32	1.49		1.49	6.20					6.20
SUMINISTRO UMAE-09	16.00	16.00	1.00	0.81	Codo	E		16	16	0.81	24	1.32	1.49		1.49	6.20					6.20
SUMINISTRO UMAE-09	16.00	16.00	1.00	0.30	Transicion	E		16	16	0.30	24	0.49	0.55		0.55	2.29					2.29
SUMINISTRO UMAE-09	36.00	30.00	1.00	0.30	Transicion	E		36	30	0.30	22	1.01	1.07		1.07	5.65				5.65	
SUMINISTRO UMAE-09	12.00	14.00	1.00	0.15	Zapato	E		12	14	0.15	24	0.20	0.23		0.23	0.93					0.93
SUMINISTRO UMAE-10	16.00	16.00	1.00	0.81	Codo	E		16	16	0.81	24	1.32	1.49		1.49	6.20					6.20
SUMINISTRO UMAE-10	14.00	12.00	1.00	0.71	Codo	E		14	12	0.71	24	0.94	1.08		1.08	4.41					4.41
SUMINISTRO UMAE-10	12.00	14.00	1.00	0.61	Codo	E		12	14	0.61	24	0.81	0.93		0.93	3.78					3.78
SUMINISTRO UMAE-10	14.00	12.00	1.00	0.71	Codo	E		14	12	0.71	24	0.94	1.08		1.08	4.41					4.41
SUMINISTRO UMAE-10	14.00	12.00	1.00	0.71	Codo	E		14	12	0.71	24	0.94	1.08		1.08	4.41					4.41
SUMINISTRO UMAE-10	16.00	16.00	1.00	0.81	Codo	E		16	16	0.81	24	1.32	1.49		1.49	6.20					6.20
SUMINISTRO UMAE-10	16.00	16.00	1.00	0.81	Codo	E		16	16	0.81	24	1.32	1.49		1.49	6.20					6.20
SUMINISTRO UMAE-10	16.00	16.00	1.00	0.81	Codo	E		16	16	0.81	24	1.32	1.49		1.49	6.20					6.20
SUMINISTRO UMAE-10	16.00	16.00	1.00	0.30	Transicion	E		16	16	0.30	24	0.49	0.55		0.55	2.29					2.29
SUMINISTRO UMAE-10	36.00	30.00	1.00	0.30	Transicion	E		36	30	0.30	22	1.01	1.07		1.07	5.65				5.65	
SUMINISTRO UMAE-10	12.00	14.00	1.00	0.15	Zapato	E		12	14	0.15	24	0.20	0.23		0.23	0.93					0.93
SUMINISTRO UMAE-11	14.00	12.00	1.00	0.71	Codo	E		14	12	0.71	24	0.94	1.08		1.08	4.41					4.41
SUMINISTRO UMAE-11	12.00	14.00	1.00	0.61	Codo	E		12	14	0.61	24	0.81	0.93		0.93	3.78					3.78
SUMINISTRO UMAE-11	12.00	14.00	1.00	0.61	Codo	E		12	14	0.61	24	0.81	0.93		0.93	3.78					3.78
SUMINISTRO UMAE-11	14.00	12.00	1.00	0.71	Codo	E		14	12	0.71	24	0.94	1.08		1.08	4.41					4.41
SUMINISTRO UMAE-11	12.00	14.00	1.00	0.61	Codo	E		12	14	0.61	24	0.81	0.93		0.93	3.78					3.78
SUMINISTRO UMAE-11	36.00	30.00	1.00	0.30	Transicion	E		36	30	0.30	22	1.01	1.07		1.07	5.65				5.65	
SUMINISTRO UMAE-12	14.00	16.00	1.00	0.71	Codo	E		14	16	0.71	24	1.08	1.23		1.23	5.08					5.08
SUMINISTRO UMAE-12	10.00	14.00	1.00	0.51	Codo	E		10	14	0.51	24	0.62	0.72		0.72	2.90					2.90
SUMINISTRO UMAE-12	14.00	16.00	1.00	0.71	Codo	E		14	16	0.71	24	1.08	1.23		1.23	5.08					5.08
SUMINISTRO UMAE-12	14.00	16.00	1.00	0.71	Codo	E		14	16	0.71	24	1.08	1.23		1.23	5.08					5.08
SUMINISTRO UMAE-12	14.00	16.00	1.00	0.71	Codo	E		14	16	0.71	24	1.08	1.23		1.23	5.08					5.08
SUMINISTRO UMAE-12	14.00	16.00	1.00	0.71	Codo	E		14	16	0.71	24	1.08	1.23		1.23	5.08					5.08
SUMINISTRO UMAE-12	16.00	14.00	1.00	0.81	Codo	E		16	14	0.81	24	1.24	1.40		1.40	5.81					5.81
SUMINISTRO UMAE-12	16.00	14.00	1.00	0.81	Codo	E		16	14	0.81	24	1.24	1.40		1.40	5.81					5.81
SUMINISTRO UMAE-12	14.00	16.00	1.00	0.30	Transicion	E		14	16	0.30	24	0.46	0.52		0.52	2.14					2.14
SUMINISTRO UMAE-12	43.00	24.00	1.00	0.30	Transicion	E		43	24	0.30	22	1.02	1.08		1.08	5.74				5.74	
SUMINISTRO UMAE-12	10.00	14.00	1.00	0.15	Zapato	E		10	14	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-13	10.00	6.00	1.00	0.51	Calsoncillo	E		10	6	0.51	24	0.41	0.52		0.52	1.94					1.94
SUMINISTRO UMAE-13	10.00	6.00	1.00	0.51	Calsoncillo	E		10	6	0.51	24	0.41	0.52		0.52	1.94					1.94
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-13	14.00	8.00	1.00	0.71	Codo	E		14	8	0.71	24	0.79	0.94		0.94	3.73					3.73
SUMINISTRO UMAE-13	24.00	12.00	1.00	1.22	Codo	E		24	12	1.22	24	2.23	2.48		2.48	10.46					10.46

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-13	26.00	14.00	1.00	1.32	Codo	E		26	14	1.32	24	2.68	2.95		2.95	12.59					12.59
SUMINISTRO UMAE-13	26.00	14.00	1.00	1.32	Codo	E		26	14	1.32	24	2.68	2.95		2.95	12.59					12.59
SUMINISTRO UMAE-13	12.00	6.00	1.00	0.61	Codo	E		12	6	0.61	24	0.56	0.68		0.68	2.61					2.61
SUMINISTRO UMAE-13	12.00	6.00	1.00	0.61	Codo	E		12	6	0.61	24	0.56	0.68		0.68	2.61					2.61
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-13	10.00	6.00	1.00	0.51	Codo	E		10	6	0.51	24	0.41	0.52		0.52	1.94					1.94
SUMINISTRO UMAE-13	50.00	16.00	1.00	2.54	Codo	E		50	16	2.54	22	8.52	9.03		9.03	47.86				47.86	
SUMINISTRO UMAE-13	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-13	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-13	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-13	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-13	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-13	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-13	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-13	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-13	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-13	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-13	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-13	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-13	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-13	50.00	16.00	1.00	2.54	Codo	E		50	16	2.54	22	8.52	9.03		9.03	47.86				47.86	
SUMINISTRO UMAE-13	16.00	50.00	1.00	0.81	Codo	E		16	50	0.81	22	2.73	2.89		2.89	15.32				15.32	
SUMINISTRO UMAE-13	16.00	50.00	1.00	0.81	Codo	E		16	50	0.81	22	2.73	2.89		2.89	15.32				15.32	
SUMINISTRO UMAE-13	50.00	16.00	1.00	2.54	Codo	E		50	16	2.54	22	8.52	9.03		9.03	47.86				47.86	
SUMINISTRO UMAE-13	16.00	50.00	1.00	0.81	Codo	E		16	50	0.81	22	2.73	2.89		2.89	15.32				15.32	
SUMINISTRO UMAE-13	6.00	10.00	1.00	0.30	Codo	E		6	10	0.30	24	0.25	0.31		0.31	1.16					1.16
SUMINISTRO UMAE-13	6.00	10.00	1.00	0.30	Codo	E		6	10	0.30	24	0.25	0.31		0.31	1.16					1.16
SUMINISTRO UMAE-13	6.00	10.00	1.00	0.30	Codo	E		6	10	0.30	24	0.25	0.31		0.31	1.16					1.16
SUMINISTRO UMAE-13	10.00	6.00	1.00	0.51	Codo	E		10	6	0.51	24	0.41	0.52		0.52	1.94					1.94
SUMINISTRO UMAE-13	6.00	10.00	1.00	0.30	Codo	E		6	10	0.30	24	0.25	0.31		0.31	1.16					1.16
SUMINISTRO UMAE-13	22.00	12.00	1.00	0.30	Transicion	E		22	12	0.30	24	0.52	0.58		0.58	2.43					2.43
SUMINISTRO UMAE-13	24.00	12.00	1.00	0.30	Transicion	E		24	12	0.30	24	0.55	0.61		0.61	2.57					2.57
SUMINISTRO UMAE-13	12.00	6.00	1.00	0.30	Transicion	E		12	6	0.30	24	0.27	0.34		0.34	1.29					1.29
SUMINISTRO UMAE-13	34.00	14.00	1.00	0.30	Transicion	E		34	14	0.30	22	0.73	0.79		0.79	4.11			4.11		
SUMINISTRO UMAE-13	30.00	14.00	1.00	0.30	Transicion	E		30	14	0.30	24	0.67	0.73		0.73	3.14					3.14
SUMINISTRO UMAE-13	12.00	6.00	1.00	0.30	Transicion	E		12	6	0.30	24	0.27	0.34		0.34	1.29					1.29
SUMINISTRO UMAE-13	24.00	8.00	1.00	0.30	Transicion	E		24	8	0.30	24	0.49	0.55		0.55	2.29					2.29
SUMINISTRO UMAE-13	14.00	6.00	1.00	0.30	Transicion	E		14	6	0.30	24	0.30	0.37		0.37	1.43					1.43
SUMINISTRO UMAE-13	14.00	8.00	1.00	0.30	Transicion	E		14	8	0.30	24	0.34	0.40		0.40	1.57					1.57
SUMINISTRO UMAE-13	18.00	10.00	1.00	0.30	Transicion	E		18	10	0.30	24	0.43	0.49		0.49	2.00					2.00
SUMINISTRO UMAE-13	18.00	12.00	1.00	0.30	Transicion	E		18	12	0.30	24	0.46	0.52		0.52	2.14					2.14
SUMINISTRO UMAE-13	32.00	12.00	1.00	0.30	Transicion	E		32	12	0.30	22	0.67	0.73		0.73	3.77			3.77		
SUMINISTRO UMAE-13	24.00	12.00	1.00	0.30	Transicion	E		24	12	0.30	24	0.55	0.61		0.61	2.57					2.57
SUMINISTRO UMAE-13	26.00	14.00	1.00	0.30	Transicion	E		26	14	0.30	24	0.61	0.67		0.67	2.86					2.86
SUMINISTRO UMAE-13	50.00	16.00	1.00	0.30	Transicion	E		50	16	0.30	22	1.01	1.07		1.07	5.65				5.65	
SUMINISTRO UMAE-13	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14					1.14
SUMINISTRO UMAE-13	61.00	62.00	1.00	0.30	Transicion	E		61	62	0.30	20	1.87	1.94		1.94	13.44			13.44		
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-13	10.00	6.00	1.00	0.15	Zapato	E		10	6	0.15	24	0.12	0.15		0.15	0.57					0.57
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-13	10.00	6.00	1.00	0.15	Zapato	E		10	6	0.15	24	0.12	0.15		0.15	0.57					0.57
SUMINISTRO UMAE-13	10.00	6.00	1.00	0.15	Zapato	E		10	6	0.15	24	0.12	0.15		0.15	0.57					0.57

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-13	12.00	6.00	1.00	0.15	Zapato	E		12	6	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-13	32.00	12.00	1.00	0.15	Zapato	E		32	12	0.15	22	0.34	0.37		0.37	1.88			1.88		
SUMINISTRO UMAE-13	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-13	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-14	16.00	10.00	1.00	0.81	Calsoncillo	E		16	10	0.81	24	1.07	1.24		1.24	5.03					5.03
SUMINISTRO UMAE-14	16.00	10.00	1.00	0.81	Calsoncillo	E		16	10	0.81	24	1.07	1.24		1.24	5.03					5.03
SUMINISTRO UMAE-14	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-14	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-14	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-14	16.00	10.00	1.00	0.81	Codo	E		16	10	0.81	24	1.07	1.24		1.24	5.03					5.03
SUMINISTRO UMAE-14	28.00	10.00	1.00	1.42	Codo	E		28	10	1.42	24	2.75	3.03		3.03	12.88					12.88
SUMINISTRO UMAE-14	10.00	28.00	1.00	0.51	Codo	E		10	28	0.51	24	0.98	1.08		1.08	4.60					4.60
SUMINISTRO UMAE-14	10.00	28.00	1.00	0.51	Codo	E		10	28	0.51	24	0.98	1.08		1.08	4.60					4.60
SUMINISTRO UMAE-14	10.00	28.00	1.00	0.51	Codo	E		10	28	0.51	24	0.98	1.08		1.08	4.60					4.60
SUMINISTRO UMAE-14	14.00	10.00	1.00	0.30	Transicion	E		14	10	0.30	24	0.37	0.43		0.43	1.72					1.72
SUMINISTRO UMAE-14	16.00	8.00	1.00	0.30	Transicion	E		16	8	0.30	24	0.37	0.43		0.43	1.72					1.72
SUMINISTRO UMAE-14	16.00	10.00	1.00	0.30	Transicion	E		16	10	0.30	24	0.40	0.46		0.46	1.86					1.86
SUMINISTRO UMAE-14	16.00	10.00	1.00	0.30	Transicion	E		16	10	0.30	24	0.40	0.46		0.46	1.86					1.86
SUMINISTRO UMAE-14	36.00	30.00	1.00	0.30	Transicion	E		36	30	0.30	22	1.01	1.07		1.07	5.65			5.65		
SUMINISTRO UMAE-14	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-14	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-14	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-14	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-14	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-14	14.00	10.00	1.00	0.15	Zapato	E		14	10	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-14	16.00	8.00	1.00	0.15	Zapato	E		16	8	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-16	12.00	6.00	1.00	0.61	Calsoncillo	E		12	6	0.61	24	0.56	0.68		0.68	2.61					2.61
SUMINISTRO UMAE-16	12.00	6.00	1.00	0.61	Calsoncillo	E		12	6	0.61	24	0.56	0.68		0.68	2.61					2.61
SUMINISTRO UMAE-16	12.00	6.00	1.00	0.61	Calsoncillo	E		12	6	0.61	24	0.56	0.68		0.68	2.61					2.61
SUMINISTRO UMAE-16	16.00	12.00	1.00	0.81	Calsoncillo	E		16	12	0.81	24	1.16	1.32		1.32	5.42					5.42
SUMINISTRO UMAE-16	16.00	12.00	1.00	0.81	Calsoncillo	E		16	12	0.81	24	1.16	1.32		1.32	5.42					5.42
SUMINISTRO UMAE-16	12.00	10.00	1.00	0.61	Codo	E		12	10	0.61	24	0.68	0.81		0.81	3.20					3.20
SUMINISTRO UMAE-16	12.00	4.00	1.00	0.61	Codo	E		12	4	0.61	24	0.50	0.62		0.62	2.32					2.32
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-16	16.00	30.00	1.00	0.81	Codo	E		16	30	0.81	24	1.90	2.06		2.06	8.91					8.91
SUMINISTRO UMAE-16	16.00	30.00	1.00	0.81	Codo	E		16	30	0.81	24	1.90	2.06		2.06	8.91					8.91
SUMINISTRO UMAE-16	30.00	16.00	1.00	1.52	Codo	E		30	16	1.52	24	3.56	3.87		3.87	16.70					16.70
SUMINISTRO UMAE-16	30.00	16.00	1.00	1.52	Codo	E		30	16	1.52	24	3.56	3.87		3.87	16.70					16.70
SUMINISTRO UMAE-16	16.00	30.00	1.00	0.81	Codo	E		16	30	0.81	24	1.90	2.06		2.06	8.91					8.91
SUMINISTRO UMAE-16	30.00	16.00	1.00	1.52	Codo	E		30	16	1.52	24	3.56	3.87		3.87	16.70					16.70
SUMINISTRO UMAE-16	16.00	30.00	1.00	0.81	Codo	E		16	30	0.81	24	1.90	2.06		2.06	8.91					8.91
SUMINISTRO UMAE-16	12.00	6.00	1.00	0.30	Transicion	E		12	6	0.30	24	0.27	0.34		0.34	1.29					1.29
SUMINISTRO UMAE-16	12.00	6.00	1.00	0.30	Transicion	E		12	6	0.30	24	0.27	0.34		0.34	1.29					1.29
SUMINISTRO UMAE-16	12.00	8.00	1.00	0.30	Transicion	E		12	8	0.30	24	0.30	0.37		0.37	1.43					1.43
SUMINISTRO UMAE-16	12.00	10.00	1.00	0.30	Transicion	E		12	10	0.30	24	0.34	0.40		0.40	1.57					1.57
SUMINISTRO UMAE-16	14.00	12.00	1.00	0.30	Transicion	E		14	12	0.30	24	0.40	0.46		0.46	1.86					1.86
SUMINISTRO UMAE-16	16.00	12.00	1.00	0.30	Transicion	E		16	12	0.30	24	0.43	0.49		0.49	2.00					2.00
SUMINISTRO UMAE-16	10.00	8.00	1.00	0.30	Transicion	E		10	8	0.30	24	0.27	0.34		0.34	1.29					1.29
SUMINISTRO UMAE-16	16.00	8.00	1.00	0.30	Transicion	E		16	8	0.30	24	0.37	0.43		0.43	1.72					1.72
SUMINISTRO UMAE-16	16.00	10.00	1.00	0.30	Transicion	E		16	10	0.30	24	0.40	0.46		0.46	1.86					1.86
SUMINISTRO UMAE-16	18.00	12.00	1.00	0.30	Transicion	E		18	12	0.30	24	0.46	0.52		0.52	2.14					2.14
SUMINISTRO UMAE-16	28.00	16.00	1.00	0.30	Transicion	E		28	16	0.30	24	0.67	0.73		0.73	3.14					3.14
SUMINISTRO UMAE-16	30.00	16.00	1.00	0.30	Transicion	E		30	16	0.30	24	0.70	0.76		0.76	3.29					3.29

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-16	61.00	37.00	1.00	0.30	Transicion	E		61	37	0.30	20	1.49	1.55		1.55	10.71			10.71		
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-16	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-16	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-16	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-16	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-16	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-16	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-16	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-16	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-16	10.00	6.00	1.00	0.15	Zapato	E		10	6	0.15	24	0.12	0.15		0.15	0.57					0.57
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-16	10.00	6.00	1.00	0.15	Zapato	E		10	6	0.15	24	0.12	0.15		0.15	0.57					0.57
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-16	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-16	12.00	6.00	1.00	0.15	Zapato	E		12	6	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-16	24.00	6.00	1.00	0.15	Zapato	E		24	6	0.15	24	0.23	0.26		0.26	1.07					1.07
SUMINISTRO UMAE-16	18.00	6.00	1.00	0.15	Zapato	E		18	6	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-17	10.00	6.00	1.00	0.51	Calsoncillo	E		10	6	0.51	24	0.41	0.52		0.52	1.94					1.94
SUMINISTRO UMAE-17	10.00	6.00	1.00	0.51	Calsoncillo	E		10	6	0.51	24	0.41	0.52		0.52	1.94					1.94
SUMINISTRO UMAE-17	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-17	12.00	6.00	1.00	0.61	Codo	E		12	6	0.61	24	0.56	0.68		0.68	2.61					2.61
SUMINISTRO UMAE-17	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-17	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-17	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-17	18.00	10.00	1.00	0.91	Codo	E		18	10	0.91	24	1.30	1.49		1.49	6.10					6.10
SUMINISTRO UMAE-17	32.00	14.00	1.00	1.63	Codo	E		32	14	1.63	22	3.80	4.13		4.13	21.35				21.35	
SUMINISTRO UMAE-17	14.00	32.00	1.00	0.71	Codo	E		14	32	0.71	22	1.66	1.81		1.81	9.34					9.34
SUMINISTRO UMAE-17	32.00	14.00	1.00	1.63	Codo	E		32	14	1.63	22	3.80	4.13		4.13	21.35				21.35	
SUMINISTRO UMAE-17	14.00	32.00	1.00	0.71	Codo	E		14	32	0.71	22	1.66	1.81		1.81	9.34					9.34
SUMINISTRO UMAE-17	12.00	10.00	1.00	0.30	Transicion	E		12	10	0.30	24	0.34	0.40		0.40	1.57					1.57
SUMINISTRO UMAE-17	16.00	10.00	1.00	0.30	Transicion	E		16	10	0.30	24	0.40	0.46		0.46	1.86					1.86
SUMINISTRO UMAE-17	20.00	10.00	1.00	0.30	Transicion	E		20	10	0.30	24	0.46	0.52		0.52	2.14					2.14

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-18	6.00	10.00	1.00	0.30	Codo	E		6	10	0.30	24	0.25	0.31		0.31	1.16					1.16
SUMINISTRO UMAE-18	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-18	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-18	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-18	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-18	6.00	10.00	1.00	0.30	Codo	E		6	10	0.30	24	0.25	0.31		0.31	1.16					1.16
SUMINISTRO UMAE-18	6.00	10.00	1.00	0.30	Codo	E		6	10	0.30	24	0.25	0.31		0.31	1.16					1.16
SUMINISTRO UMAE-18	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-18	4.00	10.00	1.00	0.20	Codo	E		4	10	0.20	24	0.14	0.19		0.19	0.68					0.68
SUMINISTRO UMAE-18	18.00	12.00	1.00	0.91	Codo	E		18	12	0.91	24	1.39	1.58		1.58	6.54					6.54
SUMINISTRO UMAE-18	12.00	18.00	1.00	0.61	Codo	E		12	18	0.61	24	0.93	1.05		1.05	4.36					4.36
SUMINISTRO UMAE-18	18.00	12.00	1.00	0.91	Codo	E		18	12	0.91	24	1.39	1.58		1.58	6.54					6.54
SUMINISTRO UMAE-18	12.00	18.00	1.00	0.61	Codo	E		12	18	0.61	24	0.93	1.05		1.05	4.36					4.36
SUMINISTRO UMAE-18	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14					1.14
SUMINISTRO UMAE-18	10.00	8.00	1.00	0.30	Transicion	E		10	8	0.30	24	0.27	0.34		0.34	1.29					1.29
SUMINISTRO UMAE-18	12.00	10.00	1.00	0.30	Transicion	E		12	10	0.30	24	0.34	0.40		0.40	1.57					1.57
SUMINISTRO UMAE-18	16.00	10.00	1.00	0.30	Transicion	E		16	10	0.30	24	0.40	0.46		0.46	1.86					1.86
SUMINISTRO UMAE-18	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14					1.14
SUMINISTRO UMAE-18	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14					1.14
SUMINISTRO UMAE-18	18.00	10.00	1.00	0.30	Transicion	E		18	10	0.30	24	0.43	0.49		0.49	2.00					2.00
SUMINISTRO UMAE-18	18.00	12.00	1.00	0.30	Transicion	E		18	12	0.30	24	0.46	0.52		0.52	2.14					2.14
SUMINISTRO UMAE-18	36.00	24.00	1.00	0.30	Transicion	E		36	24	0.30	22	0.91	0.98		0.98	5.14				5.14	
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-18	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-18	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-18	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-18	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-18	10.00	6.00	1.00	0.15	Zapato	E		10	6	0.15	24	0.12	0.15		0.15	0.57					0.57
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-18	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-18	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-18	10.00	6.00	1.00	0.15	Zapato	E		10	6	0.15	24	0.12	0.15		0.15	0.57					0.57
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-18	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-18	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-18	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-20	18.00	32.00	1.00	0.91	Codo	E		18	32	0.91	22	2.32	2.51		2.51	13.05				13.05	
SUMINISTRO UMAE-20	32.00	18.00	1.00	1.63	Codo	E		32	18	1.63	22	4.13	4.46		4.46	23.21				23.21	
SUMINISTRO UMAE-20	12.00	6.00	1.00	0.61	Codo	E		12	6	0.61	24	0.56	0.68		0.68	2.61					2.61
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-20	12.00	8.00	1.00	0.61	Codo	E		12	8	0.61	24	0.62	0.74		0.74	2.90					2.90
SUMINISTRO UMAE-20	10.00	6.00	1.00	0.51	Codo	E		10	6	0.51	24	0.41	0.52		0.52	1.94					1.94
SUMINISTRO UMAE-20	20.00	10.00	1.00	1.02	Codo	E		20	10	1.02	24	1.55	1.75		1.75	7.26					7.26
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-20	10.00	6.00	1.00	0.51	Codo	E		10	6	0.51	24	0.41	0.52		0.52	1.94					1.94
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-20	10.00	6.00	1.00	0.51	Codo	E		10	6	0.51	24	0.41	0.52		0.52	1.94					1.94
SUMINISTRO UMAE-20	14.00	8.00	1.00	0.71	Codo	E		14	8	0.71	24	0.79	0.94		0.94	3.73					3.73
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69

TABLA DE DATOS

DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-20	20.00	10.00	1.00	1.02	Codo	E		20	10	1.02	24	1.55	1.75		1.75	7.26					7.26
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-20	10.00	6.00	1.00	0.51	Codo	E		10	6	0.51	24	0.41	0.52		0.52	1.94					1.94
SUMINISTRO UMAE-20	22.00	10.00	1.00	1.12	Codo	E		22	10	1.12	24	1.82	2.04		2.04	8.52					8.52
SUMINISTRO UMAE-20	12.00	6.00	1.00	0.61	Codo	E		12	6	0.61	24	0.56	0.68		0.68	2.61					2.61
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69					1.69
SUMINISTRO UMAE-20	12.00	6.00	1.00	0.61	Codo	E		12	6	0.61	24	0.56	0.68		0.68	2.61					2.61
SUMINISTRO UMAE-20	24.00	10.00	1.00	1.22	Codo	E		24	10	1.22	24	2.11	2.35		2.35	9.88					9.88
SUMINISTRO UMAE-20	10.00	24.00	1.00	0.51	Codo	E		10	24	0.51	24	0.88	0.98		0.98	4.12					4.12
SUMINISTRO UMAE-20	20.00	10.00	1.00	1.02	Codo	E		20	10	1.02	24	1.55	1.75		1.75	7.26					7.26
SUMINISTRO UMAE-20	20.00	10.00	1.00	1.02	Codo	E		20	10	1.02	24	1.55	1.75		1.75	7.26					7.26
SUMINISTRO UMAE-20	12.00	8.00	1.00	0.61	Codo	E		12	8	0.61	24	0.62	0.74		0.74	2.90					2.90
SUMINISTRO UMAE-20	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14					1.14
SUMINISTRO UMAE-20	12.00	8.00	1.00	0.30	Transicion	E		12	8	0.30	24	0.30	0.37		0.37	1.43					1.43
SUMINISTRO UMAE-20	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14					1.14
SUMINISTRO UMAE-20	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14					1.14
SUMINISTRO UMAE-20	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14					1.14
SUMINISTRO UMAE-20	12.00	8.00	1.00	0.30	Transicion	E		12	8	0.30	24	0.30	0.37		0.37	1.43					1.43
SUMINISTRO UMAE-20	16.00	8.00	1.00	0.30	Transicion	E		16	8	0.30	24	0.37	0.43		0.43	1.72					1.72
SUMINISTRO UMAE-20	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14					1.14
SUMINISTRO UMAE-20	18.00	8.00	1.00	0.30	Transicion	E		18	8	0.30	24	0.40	0.46		0.46	1.86					1.86
SUMINISTRO UMAE-20	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14					1.14
SUMINISTRO UMAE-20	12.00	8.00	1.00	0.30	Transicion	E		12	8	0.30	24	0.30	0.37		0.37	1.43					1.43
SUMINISTRO UMAE-20	20.00	10.00	1.00	0.30	Transicion	E		20	10	0.30	24	0.46	0.52		0.52	2.14					2.14
SUMINISTRO UMAE-20	14.00	8.00	1.00	0.30	Transicion	E		14	8	0.30	24	0.34	0.40		0.40	1.57					1.57
SUMINISTRO UMAE-20	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14					1.14
SUMINISTRO UMAE-20	14.00	10.00	1.00	0.30	Transicion	E		14	10	0.30	24	0.37	0.43		0.43	1.72					1.72
SUMINISTRO UMAE-20	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14					1.14
SUMINISTRO UMAE-20	18.00	10.00	1.00	0.30	Transicion	E		18	10	0.30	24	0.43	0.49		0.49	2.00					2.00
SUMINISTRO UMAE-20	20.00	10.00	1.00	0.30	Transicion	E		20	10	0.30	24	0.46	0.52		0.52	2.14					2.14
SUMINISTRO UMAE-20	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14					1.14
SUMINISTRO UMAE-20	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14					1.14
SUMINISTRO UMAE-20	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14					1.14
SUMINISTRO UMAE-20	12.00	8.00	1.00	0.30	Transicion	E		12	8	0.30	24	0.30	0.37		0.37	1.43					1.43
SUMINISTRO UMAE-20	16.00	8.00	1.00	0.30	Transicion	E		16	8	0.30	24	0.37	0.43		0.43	1.72					1.72
SUMINISTRO UMAE-20	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14					1.14
SUMINISTRO UMAE-20	16.00	10.00	1.00	0.30	Transicion	E		16	10	0.30	24	0.40	0.46		0.46	1.86					1.86
SUMINISTRO UMAE-20	18.00	10.00	1.00	0.30	Transicion	E		18	10	0.30	24	0.43	0.49		0.49	2.00					2.00
SUMINISTRO UMAE-20	22.00	10.00	1.00	0.30	Transicion	E		22	10	0.30	24	0.49	0.55		0.55	2.29					2.29
SUMINISTRO UMAE-20	24.00	10.00	1.00	0.30	Transicion	E		24	10	0.30	24	0.52	0.58		0.58	2.43					2.43
SUMINISTRO UMAE-20	28.00	14.00	1.00	0.30	Transicion	E		28	14	0.30	24	0.64	0.70		0.70	3.00					3.00
SUMINISTRO UMAE-20	32.00	16.00	1.00	0.30	Transicion	E		32	16	0.30	22	0.73	0.79		0.79	4.11				4.11	
SUMINISTRO UMAE-20	32.00	18.00	1.00	0.30	Transicion	E		32	18	0.30	22	0.76	0.82		0.82	4.28				4.28	
SUMINISTRO UMAE-20	74.00	43.00	1.00	0.30	Transicion	E		74	43	0.30	20	1.78	1.84		1.84	12.78		12.78			
SUMINISTRO UMAE-20	10.00	8.00	1.00	0.30	Transicion	E		10	8	0.30	24	0.27	0.34		0.34	1.29					1.29
SUMINISTRO UMAE-20	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86					0.86
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50					0.50
SUMINISTRO UMAE-20	10.00	6.00	1.00	0.15	Zapato	E		10	6	0.15	24	0.12	0.15		0.15	0.57					0.57
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64					0.64

TABLA DE DATOS																					
DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	ASLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
SUMINISTRO UMAE-20	12.00	6.00	1.00	0.15	Zapato	E		12	6	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-20	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
SUMINISTRO UMAE-20	10.00	20.00	1.00	0.15	Zapato	E		10	20	0.15	24	0.23	0.26		0.26	1.07				1.07	
SUMINISTRO UMAE-20	10.00	20.00	1.00	0.15	Zapato	E		10	20	0.15	24	0.23	0.26		0.26	1.07				1.07	
SUMINISTRO UMAE-20	8.00	12.00	1.00	0.15	Zapato	E		8	12	0.15	24	0.15	0.18		0.18	0.71				0.71	
SUMINISTRO UMAE-20	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86				0.86	
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
SUMINISTRO UMAE-20	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
VENTILACION MECANICA VS-01	28.00	10.00	1.00	1.42	Calsoncillo	E		28	10	1.42	24	2.75	3.03		3.03	12.88				12.88	
VENTILACION MECANICA VS-01	12.00	10.00	1.00	0.61	Calsoncillo	E		12	10	0.61	24	0.68	0.81		0.81	3.20				3.20	
VENTILACION MECANICA VS-01	12.00	6.00	1.00	0.61	Codo	E		12	6	0.61	24	0.56	0.68		0.68	2.61				2.61	
VENTILACION MECANICA VS-01	12.00	6.00	1.00	0.61	Codo	E		12	6	0.61	24	0.56	0.68		0.68	2.61				2.61	
VENTILACION MECANICA VS-01	20.00	6.00	1.00	1.02	Codo	E		20	6	1.02	24	1.34	1.55		1.55	6.29				6.29	
VENTILACION MECANICA VS-01	20.00	6.00	1.00	1.02	Codo	E		20	6	1.02	24	1.34	1.55		1.55	6.29				6.29	
VENTILACION MECANICA VS-01	20.00	6.00	1.00	1.02	Codo	E		20	6	1.02	24	1.34	1.55		1.55	6.29				6.29	
VENTILACION MECANICA VS-01	6.00	20.00	1.00	0.30	Codo	E		6	20	0.30	24	0.40	0.46		0.46	1.89				1.89	
VENTILACION MECANICA VS-01	6.00	20.00	1.00	0.30	Codo	E		6	20	0.30	24	0.40	0.46		0.46	1.89				1.89	
VENTILACION MECANICA VS-01	6.00	20.00	1.00	0.30	Codo	E		6	20	0.30	24	0.40	0.46		0.46	1.89				1.89	
VENTILACION MECANICA VS-01	20.00	6.00	1.00	1.02	Codo	E		20	6	1.02	24	1.34	1.55		1.55	6.29				6.29	
VENTILACION MECANICA VS-01	20.00	6.00	1.00	1.02	Codo	E		20	6	1.02	24	1.34	1.55		1.55	6.29				6.29	
VENTILACION MECANICA VS-01	30.00	8.00	1.00	1.52	Codo	E		30	8	1.52	24	2.94	3.25		3.25	13.80				13.80	
VENTILACION MECANICA VS-01	10.00	6.00	1.00	0.51	Codo	E		10	6	0.51	24	0.41	0.52		0.52	1.94				1.94	
VENTILACION MECANICA VS-01	12.00	8.00	1.00	0.61	Codo	E		12	8	0.61	24	0.62	0.74		0.74	2.90				2.90	
VENTILACION MECANICA VS-01	36.00	10.00	1.00	1.83	Codo	E		36	10	1.83	22	4.27	4.65		4.65	24.02			24.02		
VENTILACION MECANICA VS-01	10.00	36.00	1.00	0.51	Codo	E		10	36	0.51	22	1.19	1.29		1.29	6.67			6.67		
VENTILACION MECANICA VS-01	10.00	36.00	1.00	0.51	Codo	E		10	36	0.51	22	1.19	1.29		1.29	6.67			6.67		
VENTILACION MECANICA VS-01	20.00	6.00	1.00	0.30	Transicion	E		20	6	0.30	24	0.40	0.46		0.46	1.86				1.86	
VENTILACION MECANICA VS-01	22.00	8.00	1.00	0.30	Transicion	E		22	8	0.30	24	0.46	0.52		0.52	2.14				2.14	
VENTILACION MECANICA VS-01	30.00	8.00	1.00	0.30	Transicion	E		30	8	0.30	24	0.58	0.64		0.64	2.72				2.72	
VENTILACION MECANICA VS-01	24.00	10.00	1.00	0.30	Transicion	E		24	10	0.30	24	0.52	0.58		0.58	2.43				2.43	
VENTILACION MECANICA VS-01	12.00	8.00	1.00	0.30	Transicion	E		12	8	0.30	24	0.30	0.37		0.37	1.43				1.43	
VENTILACION MECANICA VS-01	28.00	10.00	1.00	0.30	Transicion	E		28	10	0.30	24	0.58	0.64		0.64	2.72				2.72	
VENTILACION MECANICA VS-01	12.00	10.00	1.00	0.30	Transicion	E		12	10	0.30	24	0.34	0.40		0.40	1.57				1.57	
VENTILACION MECANICA VS-01	36.00	10.00	1.00	0.30	Transicion	E		36	10	0.30	22	0.70	0.76		0.76	3.94			3.94		
VENTILACION MECANICA VS-01	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86				0.86	
VENTILACION MECANICA VS-01	12.00	12.00	1.00	0.15	Zapato	E		12	12	0.15	24	0.18	0.21		0.21	0.86				0.86	
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
VENTILACION MECANICA VS-01	30.00	8.00	1.00	0.15	Zapato	E		30	8	0.15	24	0.29	0.32		0.32	1.36				1.36	
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
VENTILACION MECANICA VS-01	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
VENTILACION MECANICA VS-01D	24.00	14.00	1.00	1.22	Codo	E		24	14	1.22	24	2.35	2.60		2.60	11.04				11.04	
VENTILACION MECANICA VS-01D	24.00	24.00	1.00	0.30	Transicion	E		24	24	0.30	24	0.73	0.79		0.79	3.43				3.43	
VENTILACION MECANICA VS-03	10.00	6.00	1.00	0.51	Codo	E		10	6	0.51	24	0.41	0.52		0.52	1.94				1.94	
VENTILACION MECANICA VS-03	10.00	6.00	1.00	0.51	Codo	E		10	6	0.51	24	0.41	0.52		0.52	1.94				1.94	
VENTILACION MECANICA VS-03	16.00	6.00	1.00	0.30	Transicion	E		16	6	0.30	24	0.34	0.40		0.40	1.57				1.57	
VENTILACION MECANICA VS-03	16.00	14.00	1.00	0.30	Transicion	E		16	14	0.30	24	0.46	0.52		0.52	2.14				2.14	
VENTILACION MECANICA VS-03	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
VENTILACION MECANICA VS-03	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
VENTILACION MECANICA VS-03	10.00	6.00	1.00	0.15	Zapato	E		10	6	0.15	24	0.12	0.15		0.15	0.57				0.57	
VENTILACION MECANICA VS-03D	24.00	24.00	1.00	0.30	Transicion	E		24	24	0.30	24	0.73	0.79		0.79	3.43				3.43	

TABLA DE DATOS																					
DUCTO	MED. (P/M)		CANT.	LONG.	DESCRIPCION	<SA> I/E/F	<P> M/C	W	H	LONG. TOTAL	CAL	AREA M2	AISLAMI ENTO	A. INTERN O M2	A. EXTERN O M2	KG	CALIBRE				
																	CAL 16	CAL 18	CAL 20	CAL 22	CAL 24
EQUIPO																					
VENTILACION MECANICA VS-08	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
VENTILACION MECANICA VS-08	10.00	4.00	1.00	0.30	Transicion redondc	E		10	4	0.30	24	0.21	0.27		0.27	1.00				1.00	
VENTILACION MECANICA VS-08	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
VENTILACION MECANICA VS-08D	10.00	4.00	1.00	0.30	Transicion redondc	E		10	4	0.30	24	0.21	0.27		0.27	1.00				1.00	
VENTILACION MECANICA VS-09	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
VENTILACION MECANICA VS-09	10.00	4.00	1.00	0.30	Transicion redondc	E		10	4	0.30	24	0.21	0.27		0.27	1.00				1.00	
VENTILACION MECANICA VS-09	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
VENTILACION MECANICA VS-09D	10.00	4.00	1.00	0.30	Transicion redondc	E		10	4	0.30	24	0.21	0.27		0.27	1.00				1.00	
VENTILACION MECANICA VS-10	10.00	4.00	1.00	0.51	Codo	E		10	4	0.51	24	0.36	0.46		0.46	1.69				1.69	
VENTILACION MECANICA VS-10	10.00	6.00	1.00	0.30	Transicion	E		10	6	0.30	24	0.24	0.30		0.30	1.14				1.14	
VENTILACION MECANICA VS-10	10.00	6.00	1.00	0.30	Transicion redondc	E		10	6	0.30	24	0.24	0.30		0.30	1.14				1.14	
VENTILACION MECANICA VS-10	10.00	4.00	1.00	0.15	Zapato	E		10	4	0.15	24	0.11	0.14		0.14	0.50				0.50	
VENTILACION MECANICA VS-10	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
VENTILACION MECANICA VS-10	9.00	9.00	1.00	0.15	Zapato	E		9	9	0.15	24	0.14	0.17		0.17	0.64				0.64	
VENTILACION MECANICA VS-10D	10.00	6.00	1.00	0.30	Transicion redondc	E		10	6	0.30	24	0.24	0.30		0.30	1.14				1.14	

Incremento		25%	Neto
LAMINA EN METROS CUADRADOS (M2)			
Calibre 16	m2		
Calibre 18	m2		
Calibre 20	m2	30.9	24.7
Calibre 22	m2	788.5	630.8
Calibre 24	m2	9,515.1	7,612.1
LAMINA EN KILOGRAMOS (KG)			
Calibre 16	kg		
Calibre 18	kg		
Calibre 20	kg	221.4	177.1
Calibre 22	kg	4,431.4	3,545.1
Calibre 24	kg	44,625.9	35,700.7
FIBRA DE VIDRIO (M2)			
Fibra de vidrio	m2	0.0	0.0
AISL INTERNO			
AISL EXTERNO	m2	6,531.9	5,225.5
TOTALES LAMINA			
TOTAL LAMINA	m2	10,334.5	8,267.6
TOTAL LAMINA	kg	49,278.7	39,422.9