

## PRECONS III

### Lista de Costos de Renglones Constructivos

Hoja No.2

Código	Descripción	Unidad de Medida	Costos Directos					Peso Total (Kg)
			Total	Sin MAT	MAT	MO	EQ	
<b>15</b>	<b>CONDUCTOS TECNOLOG CHIMENEAS Y RECUBRIMIENTOS METALICOS</b>							
<b>150</b>	<b>DEMOLICIONES O DESMONTAJES</b>							
<b>1501</b>	<b>DESMONTAJES</b>							
150101	DESMONTAJE DE CONDUCTOS ATORNILLADOS.	t	339.40	339.40	0.00	339.40	0.00	0.00
<b>151</b>	<b>MONTAJE DE CONDUCTOS TECNOLOGICOS LIGEROS</b>							
<b>1511</b>	<b>DE UNION ATORNILLADA</b>							
151101	CHAPA =< 1 MM DIAM =< 0.5 ML ALTURA =< 2.5 ML	t	67,313.69	2,120.00	65,193.69	2,120.00	0.00	1106.03
151102	CHAPA =< 1 MM DIAM 0.51-0.8 ML ALTURA =< 2.5 ML	t	66,465.69	1,272.00	65,193.69	1,272.00	0.00	1106.03
151103	CHAPA =< 1 MM DIAM 0.81-1.4 ML ALTURA =< 2.5 ML	t	66,253.69	1,060.00	65,193.69	1,060.00	0.00	1106.03
151111	CHAPA 1.1-2.0 MM DIAM =< 0.5 ML ALTURA =< 2.5 ML	t	42,135.22	1,590.00	40,545.22	1,590.00	0.00	1073.16
151112	CHAPA 1.1-2.0 MM DIAM 0.51-0.8ML H =< 2,5ML	t	41,499.22	954.00	40,545.22	954.00	0.00	1073.16
151113	CHAPA 1,1-2MM, DIAM 0,81-1,4 ML H=<2,5 ML	t	41,340.22	795.00	40,545.22	795.00	0.00	1073.16
151121	CHAPA 2,1-2,9 MM DIAM. =<0,5 ML H=<2,5 ML	t	34,859.26	1,351.51	33,507.75	1,351.51	0.00	1047.32
151122	CHAPA 2,1-2,9 MM DIAM. 0,51-0,8 ML H=<2,5 ML	t	34,316.00	808.25	33,507.75	808.25	0.00	1047.32
151123	CHAPA 2,1-2,9 MM DIAM, =<0,5 ML H =<2,5 ML	t	34,183.50	675.75	33,507.75	675.75	0.00	1047.32
151131	CHAPA =<1 MM DIAM. =< 0,5ML H 2,51- 6 ML	t	67,778.44	2,544.00	65,234.44	2,544.00	0.00	1107.85
151132	CHAPA =< 1MM DIAM 0,51-0,8ML H 2,51-6 ML	t	66,758.19	1,523.75	65,234.44	1,523.75	0.00	1107.85
151133	CHAPA =<1 MM DIAM 0,81-1,4 ML H 2,51-6ML	t	66,506.44	1,272.00	65,234.44	1,272.00	0.00	1107.85
151141	CHAPA 1,1-2MM DIAM =<0,5 ML H 2,51-6ML	t	42,453.22	1,908.00	40,545.22	1,908.00	0.00	1073.16
151142	CHAPA 1,1-2MM DIAM 0,51- 0,8 ML H 2,51-6ML	t	41,684.73	1,139.51	40,545.22	1,139.51	0.00	1073.16
151143	CHAPA 1,1-2MM DIAM 0,81-1,4 ML H 2,51- 6 ML	t	41,499.22	954.00	40,545.22	954.00	0.00	1073.16
151151	CHAPA 2,1-2,9MM DIAM =< 0,5 ML H 2,51-6ML	t	35,124.26	1,616.51	33,507.75	1,616.51	0.00	1047.32
151152	CHAPA 2,1-2,9MM DIAM 0,51-0,8ML H 2,51-6ML	t	34,473.51	965.76	33,507.75	965.76	0.00	1047.32
151153	CHAPA 2,1-2,9 MM DIAM 0,81- 1,4 ML H 2,51-6ML	t	34,316.00	808.25	33,507.75	808.25	0.00	1047.32
151161	CHAPA =< 1 MM DIAM =< 0,5 ML H> 6 ML	t	68,124.94	2,968.00	65,156.94	2,968.00	0.00	1106.58
151162	CHAPA =< 1 MM DIAM 0,51-0,8 ML H> 6 ML	t	66,932.45	1,775.51	65,156.94	1,775.51	0.00	1106.58
151163	CHAPA =< 1 MM DIAM 0,81- 1,4 ML H> 6 ML	t	66,640.94	1,484.00	65,156.94	1,484.00	0.00	1106.58
151171	CHAPA 1,1-2MM DIAM =< 0,5 ML H> 6 ML	t	42,771.22	2,226.00	40,545.22	2,226.00	0.00	1073.16
151172	CHAPA 1,1-2MM DIAM 0,51-0,8ML H > 6ML	t	41,877.18	1,331.96	40,545.22	1,331.96	0.00	1073.16
151173	CHAPA 1,1-2MM DIAM 0,81-1,4 ML H > 6 ML	t	41,658.22	1,113.00	40,545.22	1,113.00	0.00	1073.16
151181	CHAPA 2,1-2,9 MM DIAM =< 0,5 ML H> 6 ML	t	35,402.50	1,894.75	33,507.75	1,894.75	0.00	1047.32
151182	CHAPA 2,1-2,9MM DIAM 0,51-0,8ML H> 6ML	t	34,634.00	1,126.25	33,507.75	1,126.25	0.00	1047.32
151183	CHAPA 2,1-2,9MM DIAM 0,81-1,4ML H > 6ML	t	34,448.50	940.75	33,507.75	940.75	0.00	1047.32
<b>1512</b>	<b>DE UNION SOLDADA</b>							
151201	CHAPA =< 1MM, DIAMET. =< 0,5 ML H=< 2,5 ML	t	65,995.41	4,807.73	61,187.68	2,634.20	2,173.53	1007.49
151202	CHAPA =< 1MM DIAM 0,5-0,8ML H =< 2,5 ML	t	64,782.80	3,595.12	61,187.68	1,755.00	1,840.12	1007.49
151203	CHAPA =< 1MM DIAM 0,81-1,4ML H =< 2,5ML	t	64,529.37	3,341.69	61,187.68	1,535.20	1,806.49	1007.49
151211	CHAPA 1,1-2 MM DIAM = <0,5 H =<2,5 ML	t	46,574.90	8,479.30	38,095.60	2,128.32	6,350.98	1006.38
151212	CHAPA 1.1-2MM DIAM 0.51-0.8ML H=<2.5ML	t	45,263.23	7,167.63	38,095.60	1,468.92	5,698.71	1006.38
151213	CHAPA 1,1-2 MM DIAM 0,81- 1,4 ML H=< 2,5 ML	t	44,935.32	6,839.72	38,095.60	1,304.07	5,535.65	1006.38
151221	CHAPA 2,1-2,9MM DIAM =< 0,5 ML H =< 2,5ML	t	38,173.68	5,938.89	32,234.79	1,692.03	4,246.86	1011.89
151222	CHAPA 2,1-2,9MM DIAM 0,51-0,8 ML H= <2,5 ML	t	37,054.02	4,819.23	32,234.79	1,128.80	3,690.43	1011.89
151223	CHAPA 2,1-2,9 DIAM 0,81-1,4 ML H=<2,5 ML	t	36,780.75	4,545.96	32,234.79	991.42	3,554.54	1011.89
151231	CHAPA =< 1MM DIAM =< 0,5ML H 2,51-6 ML	t	66,786.62	5,598.94	61,187.68	3,117.42	2,481.52	1007.49
151232	CHAPA =< 1MM DIAM 0,51-0,8 ML H 2,51- 6 ML	t	65,321.20	4,133.52	61,187.68	2,059.64	2,073.88	1007.49
151233	CHAPA =< 1MM, DIAM 0.81-1.4ML H2.51-6 ML	t	64,949.86	3,762.18	61,187.68	1,798.62	1,963.56	1007.49

## PRECONS III

### Lista de Costos de Renglones Constructivos

Hoja No.4

Código	Descripción	Unidad de Medida	Costos Directos					Peso Total (Kg)
			Total	Sin MAT	MAT	MO	EQ	
151241	CHAPA 1,1-2 MM DIAM =< 0,5 ML H 2,51- 6ML	t	47,703.47	9,607.87	38,095.60	2,501.64	7,106.23	1006.38
151242	CHAPA 1,1-2MM DIAM 0,51-0,8ML H 2,51-6ML	t	46,118.55	8,022.95	38,095.60	1,704.87	6,318.08	1006.38
151243	CHAPA 1,1-2MM DIAM 0,81-1,4ML H 2,51-6ML	t	45,735.97	7,640.37	38,095.60	1,512.54	6,127.83	1006.38
151251	CHAPA 2,1-2,9MM DIAM <= 0,5ML H 2,51-6 ML	t	39,035.36	6,800.57	32,234.79	1,995.86	4,804.71	1011.89
151252	CHAPA 2.1-2.9MM DIAM 0.51-0.8ML H2.51-6ML	t	37,697.10	5,462.31	32,234.79	1,322.73	4,139.58	1011.89
151253	CHAPA 2,1-2,9MM DIAM 0,81-1,4ML H 2,51-6 ML	t	37,367.75	5,132.96	32,234.79	1,157.88	3,975.08	1011.89
151261	CHAPA =< 1 MM DIAM =< 0,5 ML H > 6 ML	t	67,483.92	6,373.74	61,110.18	3,600.64	2,773.10	1006.22
151262	CHAPA =< 1 MM DIAM 0,51-0,8ML H> 6ML	t	65,805.87	4,695.69	61,110.18	2,364.27	2,331.42	1006.22
151263	CHAPA =<1MM DIAM 0.81-1.4ML H >6ML	t	65,382.25	4,272.07	61,110.18	2,062.04	2,210.03	1006.22
151271	CHAPA 1,1- 2MM DIAM =< 0,5 ML H> 6 ML	t	48,989.62	10,894.02	38,095.60	2,889.50	8,004.52	1006.38
151272	CHAPA 1,1-2MM DIAM 0,51-0,8ML H> 6ML	t	47,159.48	9,063.88	38,095.60	1,969.10	7,094.78	1006.38
151273	CHAPA 1,1-2MM DIAM 0,81-1,4 ML H>6ML	t	46,694.21	8,598.61	38,095.60	1,735.55	6,863.06	1006.38
151281	CHAPA 2,1-2,9MM DIAM =< 0,5ML H > 6ML	t	39,925.09	7,690.30	32,234.79	2,313.43	5,376.87	1011.89
151282	CHAPA 2,1-2,9MM DIAM 0,51-0,8ML H>6ML	t	38,340.17	6,105.38	32,234.79	1,516.66	4,588.72	1011.89
151283	CHAPA 2,1-2,9MM DIAM 0,81-1,4ML H > 6ML	t	37,957.60	5,722.81	32,234.79	1,324.33	4,398.48	1011.89
151291	MONTAJE DE CONDUCTOS CIRCULARES DE ACERO INOXIDABLE CHAPA DE 1.5 MM.	kg	8.13	8.13	0.00	8.13	0.00	0.00
151292	SOLDADURA EN CONDUCTOS CIRCULARES DE ACERO INOXIDABLE (ARCO ELECTRICO) CHAPA DE 1.5 MM.	m	338.21	338.21	0.00	79.49	258.72	0.00
151293	SOLDADURA EN CONDUCTOS CIRCULARES DE ACERO INOXIDABLE (GAS ARGON) CHAPA DE 1.5 MM.	m	93.66	93.66	0.00	50.17	43.49	0.00
151294	PRUEBA DE HERMETICIDAD EN CONDUCTOS CIRCULARES DE ACERO INOXIDABLE (PRUEBA DE HUMOS) CHAPA DE 1 .5 MM.	m	2.78	2.78	0.00	2.78	0.00	0.00
<b>1513 DE UNION DE CHAVETA</b>								
151301	CHAPA =< 1MM DIAM =< 0,5ML H=< 2,5ML	t	64,832.96	1,908.00	62,924.96	1,908.00	0.00	1004.63
151302	CHAPA =< 1MM,DIAM 0,51- 0,8ML H=<2,5ML	t	64,064.47	1,139.51	62,924.96	1,139.51	0.00	1004.63
151303	CHAPA =< 1MM DIAM 0,81-1,4 ML H =< 2,5 ML	t	63,878.96	954.00	62,924.96	954.00	0.00	1004.63
151311	CHAPA 1,1-2MM, DIAM =< 0,5 ML H =<2,5ML	t	40,391.28	1,431.00	38,960.28	1,431.00	0.00	1002.32
151312	CHAPA 1,1-2MM DIAM 0,51-0,8ML H =< 2,5ML	t	39,821.53	861.25	38,960.28	861.25	0.00	1002.32
151313	CHAPA 1,1-2MM DIAM,0,81-1,4ML H =< 2,5 ML	t	39,675.79	715.51	38,960.28	715.51	0.00	1002.32
151321	CHAPA 2,1-2,9MM DIAM <= 0,5 ML H <= 2,5 ML	t	33,707.86	1,219.00	32,488.86	1,219.00	0.00	1001.78
151322	CHAPA 2,1-2,9 MM DIAM 0,51-0,8 ML H =<2,5 ML	t	33,217.61	728.75	32,488.86	728.75	0.00	1001.78
151323	CHAPA 2,1-2,9 MM DIAM 0,8- 1,4 ML H =<2,5ML	t	33,098.37	609.51	32,488.86	609.51	0.00	1001.78
151331	CHAPA =< 1MM DIAM =< 0,5 ML H 2,51- 6 ML	t	65,203.96	2,279.00	62,924.96	2,279.00	0.00	1004.63
151332	CHAPA =< 1 MM DIAM 0,51- 0,8ML H 2,51- 6 ML	t	64,289.71	1,364.75	62,924.96	1,364.75	0.00	1004.63
151333	CHAPA =< 1MM DIAM 0,81-1,4ML H 2,51-6ML	t	64,064.47	1,139.51	62,924.96	1,139.51	0.00	1004.63
151341	CHAPA 1,1-2MM DIAM =< 0,5 ML H 2,51- 6 ML	t	40,682.79	1,722.51	38,960.28	1,722.51	0.00	1002.32
151342	CHAPA 1,1-2MM DIAM 0,51-0,8ML H 2,51-6ML	t	39,993.79	1,033.51	38,960.28	1,033.51	0.00	1002.32
151343	CHAPA 1,1-2MM DIAM 0,81-1,4ML H 2,51-6ML	t	39,821.53	861.25	38,960.28	861.25	0.00	1002.32
151351	CHAPA 2.1-2.9MM DIAM =<0.5ML H2.51-6ML	t	33,984.14	1,495.28	32,488.86	1,495.28	0.00	1001.78
151352	CHAPA 2,1-2,9MM DIAM 0,51-0,8 ML H 2,51- 6 ML	t	33,363.37	874.51	32,488.86	874.51	0.00	1001.78
151353	CHAPA 2,1-2,9MM DIAM 0,81- 1,4 ML H 2,51- 6 ML	t	33,217.61	728.75	32,488.86	728.75	0.00	1001.78
151361	CHAPA =<1 MM DIAM=<0.5ML H >6ML	t	65,523.97	2,676.51	62,847.46	2,676.51	0.00	1003.36
151362	CHAPA =< 1 MM DIAM 0,51-0,8ML H > 6 ML	t	64,437.46	1,590.00	62,847.46	1,590.00	0.00	1003.36
151363	CHAPA =< 1 MM DIAM 0,81-1,4 ML, H>6 ML	t	64,185.71	1,338.25	62,847.46	1,338.25	0.00	1003.36
151371	CHAPA 1,1-2MM DIAM =< 0,5 ML H > 6 ML	t	40,961.03	2,000.75	38,960.28	2,000.75	0.00	1002.32
151372	CHAPA 1,1-2 MM DIAM 0,51-0,8 ML, H> 6 ML	t	40,166.03	1,205.75	38,960.28	1,205.75	0.00	1002.32

## PRECONS III

### Lista de Costos de Renglones Constructivos

Hoja No. 6

Código	Descripción	Unidad de Medida	Costos Directos					Peso Total (Kg)
			Total	Sin MAT	MAT	MO	EQ	
151373	CHAPA 1,1-2 MM DIAM 0,81-1,4 ML H > 6 ML	t	39,967.28	1,007.00	38,960.28	1,007.00	0.00	1002.32
151381	CHAPA 2,1-2,9MM DIAM <= 0,5ML H > 6ML	t	34,196.62	1,707.76	32,488.86	1,707.76	0.00	1001.78
151382	CHAPA 2,1-2,9MM DIAM 0,51-0,8ML H > 6ML	t	33,509.11	1,020.25	32,488.86	1,020.25	0.00	1001.78
151383	CHAPA 2,1-2,9MM DIAM 0,81-1,4ML H > 6ML	t	33,350.11	861.25	32,488.86	861.25	0.00	1001.78
<b>152</b>	<b>MONTAJE DE CONDUCTOS TECNOLOGICOS PESADOS</b>							
<b>1521</b>	<b>DE UNION ATORNILLADA</b>							
152101	CHAPA 3-6 MM DIAM 0,8-1,3 ML, H=< 6 ML	t	27,495.01	785.25	26,709.76	375.57	409.68	1010.21
152102	CHAPA 3-6 MM DIAM 1,31-2,2 ML, H=< 6 ML	t	27,419.39	709.63	26,709.76	339.40	370.23	1010.21
152103	CHAPA 3-6 MM DIAM 2,21-3,5 ML H= < 6 ML	t	27,301.67	591.91	26,709.76	282.37	309.54	1010.21
152111	CHAPA 6,1-10MM DIAM 0,8- 1,31 ML, H=< 6 ML	t	24,377.15	587.48	23,789.67	280.98	306.50	1006.82
152112	CHAPA 6,1-10 MM DIAM 1,31-2,2 ML H= < 6 ML	t	24,278.28	488.61	23,789.67	233.70	254.91	1006.82
152113	CHAPA 6,1-10MM, DIAM 2,21-3,5ML H=< 6 ML	t	24,230.34	440.67	23,789.67	210.03	230.64	1006.82
152121	CHAPA 3-6MM DIAM 0,8-1,3 ML H 6,1- 12ML	t	27,606.72	896.96	26,709.76	442.13	454.83	1010.21
152122	CHAPA 3-6 MM DIAM 1,31-2,2 ML H 6,1- 12ML	t	27,518.94	809.18	26,709.76	399.83	409.35	1010.21
152123	CHAPA DE 3-6 MM DIAM 2,21-3,5 ML, H 6,1-12ML	t	27,385.59	675.83	26,709.76	332.96	342.87	1010.21
152131	CHAPA 6,1-10MM DIAM 0,8- 1,3 ML, H 6,1- 12ML	t	24,459.27	669.60	23,789.67	330.23	339.37	1006.82
152132	CHAPA 6,1-10MM, DIAM 1,31-2,2 ML H 6, 1-12ML	t	24,348.71	559.04	23,789.67	275.65	283.39	1006.82
152133	CHAPA 6,1-10MM DIAM 2,21-3,5 ML H 6,1-12L	t	24,288.57	498.90	23,789.67	246.99	251.91	1006.82
152141	CHAPA 3-6MM DIAM 0,8-1,3ML H 12,1-18ML	t	27,746.04	1,036.28	26,709.76	478.97	557.31	1010.21
152142	CHAPA 3-6 MM DIAM 1,31-2,2 ML H 12,1-18 ML	t	27,647.90	938.14	26,709.76	432.58	505.56	1010.21
152143	CHAPA 3-6 MM DIAM 2,21-3,5 ML H 12,1- 18 ML	t	27,491.97	782.21	26,709.76	360.25	421.96	1010.21
152151	CHAPA 6,1-10MM DIAM 0,8-1,3 ML H 12,1-18ML	t	24,565.18	775.51	23,789.67	357.53	417.98	1006.82
152152	CHAPA 6,1-10MM DIAM 1,31- 2,2ML H 12,1-18 ML	t	24,433.48	643.81	23,789.67	297.48	346.33	1006.82
152153	CHAPA 6,1-10MM DIAM 2,21- 3,5ML H 12,1- 18ML	t	24,367.63	577.96	23,789.67	267.46	310.50	1006.82
152161	CHAPA 3-6 MM DIAM 0,8- 1,3ML H > 18ML	t	28,030.59	1,320.83	26,709.76	515.82	805.01	1010.21
152162	CHAPA 3-6 MM DIAM 1,31-2,2ML H > 18ML	t	27,976.77	1,267.01	26,709.76	493.99	773.02	1010.21
152163	CHAPA 3-6 MM DIAM 2,21-3,5 ML H > 18 ML	t	27,705.07	995.31	26,709.76	387.55	607.76	1010.21
152171	CHAPA 6,1-10 MM DIAM 0,8-1,3ML H > 18 ML	t	24,778.28	988.61	23,789.67	386.18	602.43	1006.82
152172	CHAPA 6,1-10MM DIAM 1,31-2,2ML H > 18 ML	t	24,611.48	821.81	23,789.67	320.68	501.13	1006.82
152173	CHAPA 6,1-10MM DIAM 2,21-3,5ML H > 18ML	t	24,625.04	835.37	23,789.67	387.55	447.82	1006.82
<b>1522</b>	<b>DE UNION SOLDADA</b>							
152201	CHAPA 3-6MM DIAM 0,8-1,3ML H =< 6ML	t	28,019.57	2,566.15	25,453.42	521.30	2,044.85	1002.93
152202	CHAPA 3-6 MM DIAM 1,31- 2,2ML H= < 6 ML	t	27,855.43	2,402.01	25,453.42	477.59	1,924.42	1002.93
152203	CHAPA 3-6 MM DIAM 2,21- 3,5 ML H=< 6 ML	t	27,581.88	2,128.46	25,453.42	404.77	1,723.69	1002.93
152211	CHAPA 6,1-10MM DIAM 0,8-1,3ML H= < 6 ML	t	25,129.84	2,128.46	23,001.38	404.77	1,723.69	1003.03
152212	CHAPA 6,1-10MM DIAM 1,31-2,2ML H=< 6 ML	t	24,911.02	1,909.64	23,001.38	346.53	1,563.11	1003.03
152213	CHAPA 6,1-10MM DIAM 2,21-3,5ML H =< 6 ML	t	24,801.60	1,800.22	23,001.38	317.40	1,482.82	1003.03
152221	CHAPA 3-6MM DIAM 0,8- 1,3 ML H 6,1- 12ML	t	28,294.71	2,841.29	25,453.42	603.51	2,237.78	1002.93
152222	CHAPA 3-6 MM DIAM 1,31-2,2ML H 6,1- 12M	t	28,142.83	2,689.41	25,453.42	563.63	2,125.78	1002.93
152223	CHAPA 3-6 MM DIAM 2,21-3,5 ML H 6,1-12ML	t	27,847.40	2,393.98	25,453.42	478.22	1,915.76	1002.93
152231	CHAPA 6,1-10MM DIAM 0,8-1,3ML H 6,1-12ML	t	25,385.03	2,383.65	23,001.38	475.38	1,908.27	1003.03
152232	CHAPA 6,1-10MM DIAM 1,31-2,2 ML H 6,1-12 ML	t	25,148.72	2,147.34	23,001.38	407.07	1,740.27	1003.03
152233	CHAPA 6,1-10MM DIAM 2,21-3,5 ML H 6,1 - 12ML	t	25,030.55	2,029.17	23,001.38	372.91	1,656.26	1003.03
152241	CHAPA 3-6MM DIAM 0,8-1,3ML H 12,1-18ML	t	28,675.96	3,222.54	25,453.42	660.67	2,561.87	1002.93
152242	CHAPA 3-6 MM DIAM 1,31-2,2 ML H 12,1-18 ML	t	28,523.42	3,070.00	25,453.42	617.95	2,452.05	1002.93
152243	CHAPA 3-6MM DIAM 2,21-3,5ML H 12,1-18ML	t	28,166.19	2,712.77	25,453.42	518.30	2,194.47	1002.93
152251	CHAPA 6,1-10MM DIAM 0,8-1,3 ML H 12,1- 18 ML	t	25,725.04	2,723.66	23,001.38	521.21	2,202.45	1003.03

## PRECONS III

### Lista de Costos de Renglones Constructivos

Hoja No. 8

Código	Descripción	Unidad de Medida	Costos Directos					Peso Total (Kg)
			Total	Sin MAT	MAT	MO	EQ	
152252	CHAPA 6,1-10MM DIAM 1,31-2,2ML H 12,1-18ML	t	25,461.26	2,459.88	23,001.38	447.13	2,012.75	1003.03
152253	CHAPA 6,1-10MM DIAM 2,21-3,5ML H 12,1-18ML	t	25,328.45	2,327.07	23,001.38	410.17	1,916.90	1003.03
152261	CHAPA 3-6MM DIAM 0,8-1,3ML H > 18ML	t	29,327.42	3,874.00	25,453.42	723.72	3,150.28	1002.93
152262	CHAPA 3-6MM DIAM 1,31-2,2 ML H > 18 ML	t	29,161.39	3,707.97	25,453.42	681.03	3,026.94	1002.93
152263	CHAPA 3-6 MM DIAM 2,21-3,5 ML H> 18 ML	t	28,771.73	3,318.31	25,453.42	581.35	2,736.96	1002.93
152271	CHAPA 6,1-10MM DIAM 0,8-1,3 ML H> 18ML	t	26,298.72	3,297.34	23,001.38	575.72	2,721.62	1003.03
152272	CHAPA 6,1-10MM DIAM 1,31-2,2 ML H>18ML	t	25,987.62	2,986.24	23,001.38	495.94	2,490.30	1003.03
152273	CHAPA 6,1-10MM,DIAM 2,21- 3,5 ML H > 18ML	t	25,833.84	2,832.46	23,001.38	456.16	2,376.30	1003.03
<b>153</b>	<b>MONTAJE DE CHIMENEAS METALICAS</b>							
<b>1531</b>	<b>DE ACERO AL CARBONO ATORNILLADAS</b>							
153101	DIAM =< 0,8ML, CHAPA =< 4MM, H =< 20ML	t	7,661.58	3,206.15	4,455.43	1,446.64	1,759.51	1001.95
153111	DIAM 0,8-1,2ML CHAPA 4-10MM, H 12-30ML	t	11,728.71	7,273.28	4,455.43	1,279.72	5,993.56	1001.95
153121	DIAM >1,2ML, CHAPA > 10MM H> 30ML	t	6,898.60	2,718.19	4,180.41	532.20	2,185.99	1000.00
<b>1532</b>	<b>DE ACERO AL CARBONO SOLDADAS</b>							
153201	DIAM =< 0,8ML CHAPA =< 4MM, H =< 20ML	t	13,187.80	8,782.05	4,405.75	1,494.75	7,287.30	1005.60
153211	DIAM 0,8-1,2ML CHAPA 4-10MM H 12-30ML	t	15,917.90	11,439.71	4,478.19	1,319.43	10,120.2	1007.40
153221	DIAM >1,2ML, CHAPA > 10MM H> 30ML	t	11,794.07	7,179.07	4,615.00	639.51	6,539.56	1010.80
<b>1533</b>	<b>DE ACERO INOXIDABLE ATORNILLADAS</b>							
153301	DIAM =< 0,8ML, CHAPA =< 3MM, H =< 20ML	t	9,469.78	3,997.75	5,472.03	1,808.31	2,189.44	1001.20
153311	DIAM 0,8-1,2ML, CHAPA 3-6MM, H 12-30ML	t	14,315.15	9,095.43	5,219.72	1,599.65	7,495.78	1000.72
153321	DIAM > 1,2ML, CHAPA >6MM, H > 30ML	t	8,338.10	3,345.46	4,992.64	655.01	2,690.45	1000.29
<b>1534</b>	<b>DE ACERO INOXIDABLE SOLDADAS</b>							
153401	DIAM =< 0,8ML, CHAPA =< 3MM, H =< 20ML	t	13,736.17	8,724.23	5,011.94	1,937.40	6,786.83	1005.60
153411	DIAM 0,8-1,2ML CHAPA 3-6MM H12-30ML	t	16,868.96	11,802.16	5,066.80	1,683.87	10,118.2	1007.40
153421	DIAM > 1,2ML, CHAPA > 6MM H > 30ML	t	11,035.64	5,865.21	5,170.43	755.20	5,110.01	1010.80
<b>154</b>	<b>MONTAJE DE RECUBRIMIENTOS METALICOS</b>							
<b>1541</b>	<b>DE TUBERIAS RECTAS</b>							
154101	DIAM < 310MM, H =< 6ML	m	125.93	11.60	114.33	11.60	0.00	4.30
154102	DIAM < 310MM, H 6,1-12ML	m	127.67	13.34	114.33	13.34	0.00	4.30
154103	DIAM <310MM, H > 12ML	m	129.40	15.07	114.33	15.07	0.00	4.30
154111	DIAM 310-425MM H =< 6ML	m	184.33	14.16	170.17	14.16	0.00	6.40
154112	DIAM 310-425MM H 6,1-12ML	m	186.48	16.31	170.17	16.31	0.00	6.40
154113	DIAM 310-425MM H > 12ML	m	188.59	18.42	170.17	18.42	0.00	6.40
154121	DIAM > 425MM, H =< 6ML	m	284.65	16.10	268.55	16.10	0.00	10.10
154122	DIAM > 425MM H 6,1-12ML	m	287.07	18.52	268.55	18.52	0.00	10.10
154123	DIAM > 425MM, H > 12ML	m	289.50	20.95	268.55	20.95	0.00	10.10
<b>1542</b>	<b>DE CODOS DE TUBERIA</b>							
154201	DIAM < 310MM R = 1,5 D H =< 6ML	u	80.73	11.60	69.13	11.60	0.00	2.60
154202	DIAM <310MM R =1.5 D H 6.1-12ML	u	83.76	14.63	69.13	14.63	0.00	2.60
154203	DIAM < 310MM R = 1,5 D H > 12ML	u	84.20	15.07	69.13	15.07	0.00	2.60
154211	DIAM 310-425MM, R = 1,5 D, H =< 6ML	u	163.06	14.16	148.90	14.16	0.00	5.60
154212	DIAM 310-425MM, R = 1,5 D, H 6,1-12ML	u	165.21	16.31	148.90	16.31	0.00	5.60
154213	DIAM 310-425MM, R = 1,5 D, H > 12ML	u	167.32	18.42	148.90	18.42	0.00	5.60
154221	DIAM > 425MM, R = 1,5 D, H =< 6ML	u	401.65	16.10	385.55	16.10	0.00	14.50
154222	DIAM > 425MM R = 1,5 D H 6,1-12ML	u	404.07	18.52	385.55	18.52	0.00	14.50
154223	DIAM > 425MM, R = 1,5 D, H > 12ML	u	406.50	20.95	385.55	20.95	0.00	14.50
154231	DIAM < 310MM, R = 5 D, H =< 6ML	u	244.55	18.54	226.01	18.54	0.00	8.50

## PRECONS III

### Lista de Costos de Renglones Constructivos

Hoja No. 10

Código	Descripción	Unidad de Medida	Costos Directos					Peso Total (Kg)
			Total	Sin MAT	MAT	MO	EQ	
154232	DIAM < 310MM, R= 5 D, H 6,1-12ML	u	247.33	21.32	226.01	21.32	0.00	8.50
154233	DIAM < 310MM, R= 5 D, H > 12ML	u	250.12	24.11	226.01	24.11	0.00	8.50
154241	DIAM 310-425MM, R= 5 D, H =< 6ML	u	522.94	23.06	499.88	23.06	0.00	18.80
154242	DIAM 310-425MM, R= 5 D, H 6,1-12ML	u	526.42	26.54	499.88	26.54	0.00	18.80
154243	DIAM 310-425MM R= 5 D, H > 12ML	u	529.86	29.98	499.88	29.98	0.00	18.80
154251	DIAM > 425MM, R= 5 D, H =< 6ML	u	1,306.44	38.12	1,268.32	38.12	0.00	47.70
154252	DIAM > 425MM, R= 5 D, H 6,1-12ML	u	1,312.17	43.85	1,268.32	43.85	0.00	47.70
154253	DIAM > 425MM R= 5 D H > 12ML	u	1,317.88	49.56	1,268.32	49.56	0.00	47.70
<b>1543 DE VALVULAS BRIDAS UNIONES E INTERSECCIONES TUBERIAS</b>								
154301	DIAM < 310MM, H =< 6ML	u	59.46	11.60	47.86	11.60	0.00	1.80
154302	DIAM < 310MM, H 6,1-12ML	u	61.20	13.34	47.86	13.34	0.00	1.80
154303	DIAM < 310MM, H > 12ML	u	62.93	15.07	47.86	15.07	0.00	1.80
154311	DIAM 310-425MM, H =< 6ML	u	128.49	14.16	114.33	14.16	0.00	4.30
154312	DIAM 310-425MM, H 6,1-12ML	u	130.64	16.31	114.33	16.31	0.00	4.30
154313	DIAM 310-425MM, H > 12ML	u	132.75	18.42	114.33	18.42	0.00	4.30
154321	DIAM > 425MM, H =< 6ML	u	289.97	16.10	273.87	16.10	0.00	10.30
154322	DIAM > 425MM H 6,1-12 ML	u	292.39	18.52	273.87	18.52	0.00	10.30
154323	DIAM > 425MM, H > 12ML	u	294.82	20.95	273.87	20.95	0.00	10.30
<b>1544 DE CONDUCTOS TOLVAS Y RECIPIENTES</b>								
154401	CONDUCTO Y TOLVA HORIZONTALES H =< 6ML	m2	164.19	20.61	143.58	20.61	0.00	5.40
154402	CONDUCTO Y TOLVA HORIZONTALES 6,1-12ML	m2	167.28	23.70	143.58	23.70	0.00	5.40
154403	CONDUCTO Y TOLVA HORIZONTALES, H > 12ML	m2	170.37	26.79	143.58	26.79	0.00	5.40
154411	CONDUCTO Y TOLVA VERTICALES, H =< 6ML	m2	157.74	14.16	143.58	14.16	0.00	5.40
154412	CONDUCTO Y TOLVA VERTICALES, H 6,1-12ML	m2	159.89	16.31	143.58	16.31	0.00	5.40
154413	CONDUCTO Y TOLVA VERTICALES, H > 12ML	m2	162.00	18.42	143.58	18.42	0.00	5.40
154421	CUERPO DE RECIPIENTES HORIZONTALES, H =< 6ML	m2	161.61	18.03	143.58	18.03	0.00	5.40
154422	CUERPO DE RECIPIENTES HORIZONTALES, H 6,1-12ML	m2	164.31	20.73	143.58	20.73	0.00	5.40
154423	CUERPO DE RECIPIENTES HORIZONTALES, H > 12ML	m2	167.02	23.44	143.58	23.44	0.00	5.40
154431	CUERPO DE RECIPIENTE VERTICAL, H =< 6ML	m2	159.68	16.10	143.58	16.10	0.00	5.40
154432	CUERPO DE RECIPIENTE VERTICAL, H 6,1-12ML	m2	162.10	18.52	143.58	18.52	0.00	5.40
154433	CUERPO DE RECIPIENTE VERTICAL, H > 12ML	m2	164.53	20.95	143.58	20.95	0.00	5.40
<b>1545 DE TAPAS DE DOMOS RECIPIENTES Y EQUIPOS SEMIESFERICOS</b>								
154501	DIAM =< 1,2ML, HORIZONTAL-VERTICAL, H =< 6ML	u	506.54	51.52	455.02	51.52	0.00	4.91
154502	DIAM =< 1,2ML, HORIZONTAL-VERTICAL, H 6,1-12ML	u	513.81	58.79	455.02	58.79	0.00	4.91
154503	DIAM =< 1,2ML, HORIZONTAL-VERTICAL, H > 12ML	u	521.48	66.46	455.02	66.46	0.00	4.91
154511	DIAM 1,21-2,0 ML HORIZONTAL-VERTICAL H =< 6ML	u	1,555.98	154.56	1,401.42	154.56	0.00	26.70
154512	DIAM 1,21-2,0ML HORIZONTAL-VERTICAL, H 6,1-12ML	u	1,577.83	176.41	1,401.42	176.41	0.00	26.70
154513	DIAM 1,21-2,0ML HORIZONTAL-VERTICAL, H > 12ML	u	1,600.84	199.42	1,401.42	199.42	0.00	26.70
154521	DIAM > 2,0ML, HORIZONTAL-VERTICAL, H =< 6ML	u	4,955.05	386.40	4,568.65	386.40	0.00	75.80
154522	DIAM > 2,0ML, HORIZONTAL-VERTICAL, H 6,1-12ML	u	5,009.68	441.03	4,568.65	441.03	0.00	75.80
154523	DIAM > 2,0ML, HORIZONTAL-VERTICAL, H > 12ML	u	5,067.20	498.55	4,568.65	498.55	0.00	75.80
154531	DIAM =<1,2ML, SOBRECABEZA, H =< 6ML	u	519.43	64.41	455.02	64.41	0.00	4.91
154532	DIAM =< 1,2ML, SOBRECABEZA, H 6,1-12ML	u	528.51	73.49	455.02	73.49	0.00	4.91
154533	DIAM =< 1,2ML, SOBRECABEZA, H >12ML	u	538.10	83.08	455.02	83.08	0.00	4.91
154541	DIAM 1,21-2,0ML, SOBRECABEZA, H =< 6ML	u	1,594.63	193.21	1,401.42	193.21	0.00	26.70
154542	DIAM 1,21-2,0ML, SOBRECABEZA, H 6,1-12ML	u	1,621.94	220.52	1,401.42	220.52	0.00	26.70
154543	DIAM 1,21-2,0ML, SOBRECABEZA, H > 12ML	u	1,650.70	249.28	1,401.42	249.28	0.00	26.70

## PRECONS III

### *Lista de Costos de Renglones Constructivos*

Hoja No. 12

Código	Descripción	Unidad de Medida	Costos Directos					Peso Total (Kg)
			Total	Sin MAT	MAT	MO	EQ	
154551	DIAM > 2,0ML, SOBRECABEZA, H = < 6ML	u	5,083.85	515.20	4,568.65	515.20	0.00	75.80
154552	DIAM > 2,0ML, SOBRECABEZA, H 6,1-12ML	u	5,156.67	588.02	4,568.65	588.02	0.00	75.80
154553	DIAM >2.0ML SOBRECABEZA H>12ML	u	5,233.37	664.72	4,568.65	664.72	0.00	75.80
<b>1546 FABRICACION Y MONTAJE</b>								
154601	DE RECUBRIMIENTOS METALICOS DE TUBERIAS RECTAS Y CODOS HASTA 315 MM DE DIAMETRO CON CHAPAS DE HASTA 1.5 MM	m2	333.07	333.07	0.00	333.07	0.00	0.00
154620	FABRICACIÓN Y MONTAJE DE RECUBRIMIENTOS DE TUBERÍAS RECTAS Y CONEXIONES DE 325-630 MM DE DIÁM. EXT. CON CHAPAS DE HTA. 1.5 MM. EN LA INDUSTRIA AZUCARERA	m2	341.54	341.54	0.00	341.54	0.00	0.00
154621	FABRICACIÓN Y MONTAJE DE RECUBRIMIENTOS DE TUBERÍAS RECTAS Y CONEXIONES DE 700-1000 MM DE DIÁM. EXT. CON CHAPAS DE HTA. 1.5 MM. EN LA INDUSTRIA AZUCARERA	m2	350.01	350.01	0.00	350.01	0.00	0.00