



Acería Ramos Arizpe

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 TRAMO SANTA CRUZ OJO CALIENTE
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**CERTIFICADO DE CALIDAD DE PRODUCTO TERMINADO
 / CERTIFICATE MATERIAL TEST REPORT**

No. Certificado / Certificate No:	90514 - 20933663
Fecha / Date:	17/03/2017

EXCELENCIA EN CALIDAD

Hecho en México / Made in Mexico

DATOS DEL CLIENTE / SOLD TO		CLIENTE CONSIGNADO / SHIP TO	DATOS DEL EMBARQUE / SHIPPING INFORMATION	
Cliente / Customer: FERRE BARNIEDO SA DE CV		Cliente / Customer: ECATEPEC (MEXICO)	Núm. Viaje / Travel No: 90514	
Dirección / Address: AVE. REVOLUCION 81, SAN CRISTOBAL		Dirección / Address: AV. REVOLUCION # 81 SAN CRISTOBAL	Núm. Factura / Invoice No: FQ49812	
Ciudad / City: ECATEPEC	Estado / State: EDO. DE MEXICO	Ciudad / City: ECATEPEC	Estado / State: EDO. DE MEXICO	Pedido / Customer Order No: 20933663
Teléfono / Phone: 555-836-1028 y	Pais / Country: MEXICO C.P./ZIP 55924			Núm. Plan / Shipping Plan: 96589
Electrónico / eMail: compras@ferrebarniedo.com.mx				Fecha Embarque / Date: 17/03/2017
				Orden de Compra / Purchase Order: 101967

COMPOSICIÓN QUÍMICA / CHEMICAL COMPOSITION (% PESO / WEIGHT)																		
Colada / Heat	Secuencia / Sequence	Clave / Code	Producto / Description of Goods	% C	% Mn	% Si	% P	% S	% Cu	% Cr	% Ni	% Mo	% Sn	% Ti	% V	% Nb	% N	CE
				AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG
10675	19789	60235	SOLERA 3" x 5/8" A-36 P 6.10m 2.0T	0.21	0.95	0.22	0.008	0.005	0.10	0.057	0.047	0.009	0.006	0.010	0.014	0.012	0.009	0.384
15850	24242	60235	SOLERA 3" x 5/8" A-36 P 6.10m 2.0T	0.20	0.90	0.19	0.008	0.010	0.09	0.048	0.059	0.012	0.008	0.008	0.013	0.008	0.008	0.363
20307	27813	15273	SOLERA 5" x 1/2" A36/529-50 6.10m 2.0T	0.21	0.93	0.20	0.009	0.007	0.10	0.072	0.059	0.018	0.006	0.010	0.015	0.008	0.007	0.380
21604	29055	60346	ANGULO LI 2 1/2" x 2 1/2" x 3/16" A36/529-50 12.20m 4.0T	0.20	0.77	0.20	0.011	0.015	0.20	0.105	0.117	0.020	0.009	0.001	0.003	0.003	0.007	0.350
21604	29056	60346	ANGULO LI 2 1/2" x 2 1/2" x 3/16" A36/529-50 12.20m 4.0T	0.20	0.77	0.20	0.011	0.015	0.20	0.105	0.117	0.020	0.009	0.001	0.003	0.003	0.007	0.350
21605	29054	60346	ANGULO LI 2 1/2" x 2 1/2" x 3/16" A36/529-50 12.20m 4.0T	0.20	0.76	0.19	0.013	0.005	0.20	0.110	0.115	0.020	0.009	0.001	0.004	0.003	0.007	0.357

PROPIEDADES MECÁNICAS / MECHANICAL PROPERTIES											
Colada / Heat	Secuencia / Sequence	Clave / Code	Producto / Description of Goods	Calibre / Diameter	Cantidad / Bundle	RT kg/mm²	TS PSI	% Elong / Elong	LF kg/mm²	YS* PSI	P. Doblez / Bend Test
						AVG	AVG	AVG	AVG	AVG	
10675	19789	60235	SOLERA 3" x 5/8" A-36 P 6.10m 2.0T	3" x 5/8"	2	51.79	73697.17	32.95	37.99	54045.54	Cumple / Successfully
15850	24242	60235	SOLERA 3" x 5/8" A-36 P 6.10m 2.0T	3" x 5/8"	3	52.83	75177.09	33.62	36.19	51496.37	Cumple / Successfully
20307	27813	15273	SOLERA 5" x 1/2" A36/529-50 6.10m 2.0T	5" x 1/2"	5	50.22	71463.06	34.94	36.58	52053.3	Cumple / Successfully
21604	29055	60346	ANGULO LI 2 1/2" x 2 1/2" x 3/16" A36/529-50 12.20m 4.0T	2 1/2" x 2 1/2" x 3/16"	3	54.38	77382.74	24.41	41.11	58499.53	Cumple / Successfully
21604	29056	60346	ANGULO LI 2 1/2" x 2 1/2" x 3/16" A36/529-50 12.20m 4.0T	2 1/2" x 2 1/2" x 3/16"	3	52.23	74323.29	24.41	39.03	55539.69	Cumple / Successfully
21605	29054	60346	ANGULO LI 2 1/2" x 2 1/2" x 3/16" A36/529-50 12.20m 4.0T	2 1/2" x 2 1/2" x 3/16"	1	52.92	75305.16	24.41	41.11	58499.53	Cumple / Successfully

Certificamos que este material ha sido producido, inspeccionado y probado de acuerdo a las normas de fabricación del acero aplicables a la ASTM A36-2008, A529-2005 (re aprobada el 2009), A572-2012 y A992-2011 y a las normas dimensionales NMX B252, ASTM A6/A6M-2012. / We certify that this material has been produced, inspected and tested according to standards applicable steelmaking to ASTM A36-2008, A529-2005 (Reapproved 2009), A572-2012 y A992-2011, and the dimensional standards NMX B252, ASTM A6/A6M-2012.



[Handwritten Signature]

FRANCISCO JAVIER VARGAS SOTO
 Gerente de Aseguramiento de Calidad / Quality Assurance Manager