



Acería Ramos Arizpe
 CARRETERA MONCLOVA KM 4 NUMERO 2125,
 TRA
 C.P./ZIP RAMOS ARIZPE, COAHUILA
 Tel/Phone (+52) 01 818 368 1111
 MX 01 800 021 3322, USA 1800 332 2376

**CERTIFICADO DE CALIDAD DE PRODUCTO
 TERMINADO / CERTIFICATE MATERIAL TEST REPORT**

51290

No. Certificado / Certificate No:	28601 - 20051852
Fecha / Date:	15/08/2014

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: QUERETARO		Núm. Viaje / Travel No: 28601	
Dirección / Address: AVE. REVOLUCION 81 SAN CRISTOBAL		Dirección / Address: CARRETERA SAN LUIS - QUERETARO # 1439 EL SALITRE		Núm. Factura / Invoice No: FQ18806	
Ciudad / City: ECATEPEC	Estado / State: EDO. DE MEXICO	Ciudad / City: QUERETARO	Estado / State: QUERETARO	Pedido / Customer Order No: 20051852	
Teléfono / Phone: 555-836-1028 y		Pais / Country: MEXICO C.P./ZIP 55024		Núm. Plan / Shipping Plan: 31129	
Correo Electrónico / eMail: compras@ferrebarniedo.com.mx				Fecha Embarque / Date: 15/08/2014	
				Orden de Compra / Purchase Order: 700490	

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	
5500	2652	79678	REDONDO S 3/8" A-36 6.10m 1.5T	0.14	0.68	0.14	0.008	0.007	0.18	0.126	0.071	0.017	0.011	0.000	0.002	0.000	0.000	0.281
5826	2764	60120	CUADRADO S 3/8" A-36 6.10m 1.5T	0.15	0.66	0.15	0.008	0.011	0.19	0.078	0.086	0.017	0.011	0	0	0.000	0.000	0.279
6136	2763	60120	CUADRADO S 3/8" A-36 6.10m 1.5T	0.16	0.65	0.17	0.005	0.003	0.16	0.049	0.061	0.011	0.011	0	0	0.001	0.000	0.281
5829	2701	60219	SOLERA 3/4" x 1/8" A-36 6.10m 2.0T	0.14	0.68	0.12	0.007	0.006	0.20	0.091	0.079	0.017	0.011	0.000	0.005	0.000	0.000	0.271
5830	2700	60219	SOLERA 3/4" x 1/8" A-36 6.10m 2.0T	0.16	0.68	0.15	0.007	0.011	0.20	0.069	0.073	0.016	0.012	0.001	0.008	0.000	0.000	0.295
5505	2709	60220	SOLERA 3/4" x 3/16" A-36 6.10m 2.0T	0.14	0.66	0.14	0.008	0.010	0.14	0.062	0.062	0.013	0.010	0.000	0.003	0.000	0.000	0.266
5505	2710	60220	SOLERA 3/4" x 3/16" A-36 6.10m 2.0T	0.14	0.66	0.14	0.008	0.010	0.14	0.062	0.062	0.013	0.010	0.000	0.003	0.000	0.000	0.266
6143	2783	60281	ANGULO LI 1" x 1" x 1/8" A-36 6.10m 2.0T	0.14	0.66	0.14	0.006	0.006	0.20	0.072	0.071	0.015	0.012	0.000	0.003	0.001	0.000	0.273
6145	2781	60281	ANGULO LI 1" x 1" x 1/8" A-36 6.10m 2.0T	0.13	0.66	0.13	0.005	0.016	0.18	0.056	0.062	0.011	0.014	0.000	0.003	0.001	0.000	0.262
6145	2782	60281	ANGULO LI 1" x 1" x 1/8" A-36 6.10m 2.0T	0.13	0.66	0.13	0.005	0.016	0.18	0.056	0.062	0.011	0.014	0.000	0.003	0.001	0.000	0.262
1174	2843	60282	ANGULO LI 1" x 1" x 3/16" A-36 6.10m 1.1T	0.15	0.72	0.16	0.008	0.006	0.15	0.072	0.063	0.011	0.011	0.001	0.006	0.002	0.000	0.290
1959	2841	60282	ANGULO LI 1" x 1" x 3/16" A-36 6.10m 1.1T	0.15	0.73	0.18	0.005	0.006	0.12	0.061	0.062	0.010	0.008	0.001	0.006	0.000	0.000	0.313
1962	2842	60282	ANGULO LI 1" x 1" x 3/16" A-36 6.10m 1.1T	0.13	0.66	0.16	0.005	0.004	0.12	0.054	0.053	0.009	0.009	0.000	0.006	0.000	0.000	0.253
3305	11934	10236	ANGULO LI 6" x 6" x 1/2" A-36 P 6.10m 2.0T	0.24	0.90	0.17	0.005	0.002	0.09	0.062	0.040	0.008	0.006	0.008	0.015	0.009	0.000	0.398
5596	13699	79876	CANAL 8" x 11.5 A36/A572-50 6.10m 2.0T	0.21	0.91	0.19	0.006	0.007	0.10	0.046	0.055	0.014	0.007	0.010	0.014	0.009	0.000	0.377

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. La información de las propiedades químicas y mecánicas contenida en el presente certificado son valores promedio obtenidos de los registros internos de la compañía, cumpliendo con la norma antes mencionada. / 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. All information described in the certificate are average values ??that are based on internal company records in compliance with the above rule.



(Handwritten signature)

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



EXCELENCIA EN CALIDAD

Acería Ramos Arizpe
 CARRETERA MONCLOVA KM 4 NUMERO 2125,
 TRA
 C.P./ZIP RAMOS ARIZPE, COAHUILA
 Tel/Phone (+52) 01 818 368 1111
 MX 01 800 021 3322, USA 1800 332 2376

**CERTIFICADO DE CALIDAD DE PRODUCTO
 TERMINADO / CERTIFICATE MATERIAL TEST REPORT**

No. Certificado / Certificate No:	28601 - 20051852
Fecha / Date:	15/08/2014

Hecho en México / Made in Mexico

PROPIEDADES MECÁNICAS / MECHANICAL PROPERTIES											
Colada / Heat	Secuencia / Sequence	Clave / Code	Producto / Description of Goods	Calibre / Diameter	Cantidad / Bundie	RT kg/mm ² AVG	TS PSI AVG	% Elong / Elong AVG	LF kg/mm ² AVG	YS PSI AVG	P. Doble / Bend Test
5500	2652	79678	REDONDO S 3/8" A-36 6.10m 1.5T	3/8"	3	49.90	70997.72	35.15	31.54	44875.11	Cumple / Successfully
5826	2764	60120	CUADRADO S 3/8" A-36 6.10m 1.5T	3/8"	6	45.20	64310.56	34.35	35.12	49968.73	Cumple / Successfully
6136	2763	60120	CUADRADO S 3/8" A-36 6.10m 1.5T	3/8"	4	45.30	64452.84	34.35	36.92	52529.77	Cumple / Successfully
5829	2701	60219	SOLERA 3/4" x 1/8" A-36 6.10m 2.0T	3/4" x 1/8"	1	50.17	71381.87	26.39	35.82	50964.69	Cumple / Successfully
5830	2700	60219	SOLERA 3/4" x 1/8" A-36 6.10m 2.0T	3/4" x 1/8"	3	43.31	61621.46	34.27	31.90	45387.32	Cumple / Successfully
5505	2709	60220	SOLERA 3/4" x 3/16" A-36 6.10m 2.0T	3/4" x 3/16"	1	43.35	61678.38	31.69	26.93	38316.00	Cumple / Successfully
5505	2710	60220	SOLERA 3/4" x 3/16" A-36 6.10m 2.0T	3/4" x 3/16"	1	43.06	61265.76	34.25	29.05	41332.34	Cumple / Successfully
6143	2783	60281	ANGULO LI 1" x 1" x 1/8" A-36 6.10m 2.0T	1" x 1" x 1/8"	3	42.68	60725.10	32.89	33.18	47208.50	Cumple / Successfully
6145	2781	60281	ANGULO LI 1" x 1" x 1/8" A-36 6.10m 2.0T	1" x 1" x 1/8"	5	50.02	71168.45	26.47	36.73	52259.44	Cumple / Successfully
6145	2782	60281	ANGULO LI 1" x 1" x 1/8" A-36 6.10m 2.0T	1" x 1" x 1/8"	2	43.83	62361.32	32.46	33.26	47322.32	Cumple / Successfully
1174	2843	60282	ANGULO LI 1" x 1" x 3/16" A-36 6.10m 1.1T	1" x 1" x 3/16"	5	43.92	62489.37	34.29	33.27	47336.55	Cumple / Successfully
1959	2841	60282	ANGULO LI 1" x 1" x 3/16" A-36 6.10m 1.1T	1" x 1" x 3/16"	2	43.07	61279.99	27.93	26.70	37988.76	Cumple / Successfully
1962	2842	60282	ANGULO LI 1" x 1" x 3/16" A-36 6.10m 1.1T	1" x 1" x 3/16"	1	41.89	59601.09	30.57	33.39	47507.29	Cumple / Successfully
3305	11934	10236	ANGULO LI 6" x 6" x 1/2" A-36 P 6.10m 2.0T	6" x 6" x 1/2"	2	52.94	75323.03	34.86	37.73	53682.24	Cumple / Successfully
5596	13699	79876	CANAL 8" x 11.5 A36/A572-50 6.10m 2.0T	8" x 11.5	1	55.77	79349.55	32.97	41.67	59288.07	Cumple / Successfully

FERREBARNIEDO S.A. DE C.V.
 ESTE CERTIFICADO NO AMPARA LA REMISION DE NUESTROS ARCHIVOS,
 DEL ORIGINAL DE LA REMISION No. 58-36-10-00
 ventas@ferrebarniedo.com.mx

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. La información de las propiedades químicas y mecánicas contenida en el presente certificado son valores promedio obtenidos de los registros internos de la compañía, cumpliendo con la norma antes mencionada. / 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. All information described in the certificate are average values that are based on internal company records in compliance with the above rule.



(Handwritten signature)

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