



Acería Ramos Arizpe
 CARRETERA MONCLOVA KM 4 NUMERO 2125
 TRAMO SANTA CRUZ OJO CALIENTE
 C.P./ZIP RAMOS ARIZPE, COAHUILA
 Tel/Phone (+52) 01 818 368 1111
 MX-01 800 021 3322; USA 1800 332 2378

CERTIFICADO DE CALIDAD / CERTIFICATE OF TEST AND ANALYSIS

No. Certificado / Certificate No:	103378 - 21199121
Fecha / Date:	06/09/2017

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: ACEROMEX SA DE CV		Cliente / Customer: TULTITLAN		Núm. Viaje / Travel No: 103378	
Dirección / Address: CARRETERA LIBRE FEDERAL MONTERREY LAREDO KM 27 CENTRO		Dirección / Address: VIA JOSE LOPEZ PORTILLO # 12 BIS COL. SAN FRANCISCO CHILPA		Núm. Factura / Invoice No: PQ57069	
Ciudad / City: CIENEGA DE FLORES	Estado / State: N.L.	Ciudad / City: TULTITLAN	Estado / State: EDO. DE MEXICO	Pedido / Customer Order No: 21199121	
Teléfono / Phone: 81555500	País / Country: MEXICO C.P./ZIP 65550			Núm. Plan / Shipping Plan: 110095	
Correo Electrónico / eMail: lmontoya@aceromex.com				Fecha Embarque / Date: 06/09/2017	
				Orden de Compra / Purchase Order: 4500195015	

COMPOSICIÓN QUÍMICA / CHEMICAL COMPOSITION (% PESO / WEIGHT)																																	
Cobeta / Heat	Secuencia / Sequence	Clave / Code	Producto / Description of Goods	% C		% Mn		% Si		% P		% S		% Cu		% Cr		% Ni		% Mo		% Sn		% Ti		% V		PPM Nb		PPM N		CE	
				AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG
24735	8879	79678	REDONDO S 3/8" A-36 6.10m 1.5T	0.13	0.66	0.20	0.017	0.010	0.22	0.07	0.009	0.022	0.010	0.001	0.004	0.022	0.010	0.001	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	22	94	0.28		
24740	8877	79678	REDONDO S 3/8" A-36 6.10m 1.5T	0.16	0.73	0.21	0.013	0.007	0.22	0.11	0.08	0.029	0.011	0.001	0.003	0.020	0.010	0.001	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	20	94	0.29			
24742	8880	79678	REDONDO S 3/8" A-36 6.10m 1.5T	0.13	0.68	0.18	0.010	0.006	0.24	0.10	0.11	0.028	0.011	0.001	0.004	0.017	0.010	0.001	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	17	94	0.28			
23061	30333	80237	SOLEIRA 3" x 1" A-36 P 6.10m 2.0T	0.21	0.94	0.20	0.009	0.011	0.11	0.05	0.04	0.018	0.005	0.012	0.014	0.018	0.005	0.012	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	126	74	0.38				
24688	31761	14640	SOLEIRA 8" x 1/2" A529-55 EG 6.10m 2.0T	0.25	1.18	0.22	0.010	0.007	0.19	0.07	0.08	0.019	0.010	0.011	0.013	0.014	0.009	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	97	104	0.48				
17831	25885	10994	SOLEIRA 8" x 3/8" A36/A572-50 6.10m 2.0T	0.21	0.92	0.20	0.006	0.007	0.12	0.07	0.07	0.017	0.006	0.009	0.015	0.014	0.009	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	104	86	0.37				
17852	8484	80282	ANGULO L1 1" x 1" x 3/16" A-36 P 6.10m 1.1T	0.15	0.66	0.19	0.006	0.006	0.20	0.06	0.09	0.021	0.011	0.001	0.007	0.016	0.010	0.001	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	16	90	0.28				
17954	8483	80282	ANGULO L1 1" x 1" x 3/16" A-36 P 6.10m 1.1T	0.15	0.66	0.19	0.007	0.009	0.21	0.06	0.09	0.020	0.014	0.001	0.007	0.016	0.010	0.001	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	11	90	0.28				
20694	8487	80282	ANGULO L1 1" x 1" x 3/16" A-36 P 6.10m 1.1T	0.14	0.74	0.19	0.011	0.011	0.20	0.09	0.09	0.025	0.009	0.001	0.002	0.016	0.010	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	16	87	0.28				
20684	8488	80282	ANGULO L1 1" x 1" x 3/16" A-36 P 6.10m 1.1T	0.14	0.74	0.19	0.011	0.011	0.20	0.09	0.09	0.025	0.009	0.001	0.002	0.016	0.010	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	16	87	0.28				
24459	31552	10497	CANAL 10" x 15.3 A36/A572-50 6.10m 2.0T	0.20	0.90	0.20	0.011	0.006	0.11	0.03	0.05	0.014	0.012	0.009	0.015	0.014	0.009	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	104	100	0.36				

PROPIEDADES MECÁNICAS / MECHANICAL PROPERTIES												
Cobeta / Heat	Secuencia / Sequence	Clave / Code	Producto / Description of Goods	Calibre / Diameter	Cantidad / Bundles	RT		Y9		% Elong / Elong		P. Doblez / Bend Test
						kg/mm²	PSI	AVG	AVG	AVG	AVG	
24735	8879	79678	REDONDO S 3/8" A-36 6.10m 1.5T	3/8"	12	43.3	81615.9	35.7	26.4	40441.8	Cumple / Successfully	
24740	8877	79678	REDONDO S 3/8" A-36 6.10m 1.5T	3/8"	4	41.9	59694.8	29.9	26.7	38122.1	Cumple / Successfully	
24742	8880	79678	REDONDO S 3/8" A-36 6.10m 1.5T	3/8"	2	43.3	81615.9	35.5	29.4	40441.8	Cumple / Successfully	
23051	30333	80237	SOLEIRA 3" x 1" A-36 P 6.10m 2.0T	3" x 1"	2	64.2	77211.9	32.1	39.3	50260.3	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.



Francisco Javier Vargas Soto

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





EXCELENCIA EN CALIDAD

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CERTIFICADO DE CALIDAD / CERTIFICATE OF TEST
 AND ANALYSIS

No. Certificado / Certificate No:	103378 - 21199121
Fecha / Date:	08/09/2017

Hecho en México / Made in Mexico

PROPIEDADES MECANICAS / MECHANICAL PROPERTIES												
Cola / Heat	Secuencia / Sequence	Clave / Code	Producto / Description of Goods	Calibre / Diameter	Cantidad / Bundle	RT kg/mm ² AVG	TS PSI AVG	% Elong / Elong AVG	LF kg/mm ² AVG	YS PSI AVG	P. Doblez / Bend Test	
24688	31781	14540	SOLERA 8" x 1/2" A529-56 EG 8.10m 2.0T	8" x 1/2"	2	52.3	74494.0	30.5	42.9	81148.3	Cumple / Successfully	
17831	25885	10994	SOLERA 8" x 3/8" A36/A529-50 8.10m 2.0T	8" x 3/8"	3	52.4	74664.8	30.3	36.1	81364.5	Cumple / Successfully	
17952	8484	60282	ANGULO L1 1" x 1" x 3/16" A-36 P 8.10m 1.1T	1" x 1" x 3/16"	7	47.8	68261.3	24.7	31.4	44724.8	Cumple / Successfully	
17954	8483	60282	ANGULO L1 1" x 1" x 3/16" A-36 P 8.10m 1.1T	1" x 1" x 3/16"	2	48.8	69442.4	24.7	37.2	52964.0	Cumple / Successfully	
20684	8487	60282	ANGULO L1 1" x 1" x 3/16" A-36 P 8.10m 1.1T	1" x 1" x 3/16"	3	43.4	61857.8	30.5	27.8	39687.8	Cumple / Successfully	
20684	8488	60282	ANGULO L1 1" x 1" x 3/16" A-36 P 8.10m 1.1T	1" x 1" x 3/16"	2	42.9	61089.3	30.5	29.3	41793.5	Cumple / Successfully	
24458	31552	10497	CANAL 10" x 15.3 A36/A572-50 8.10m 2.0T	10" x 15.3	1	53.1	78818.2	33.6	37.5	53476.3	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/A8M-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/A8M-2012.

[Signature]

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

