





**MATERIAL TEST REPORT - QUALITY MANAGEMENT SYSTEM**  
 FORZA STEEL - PRODUCTION FACILITY:  
 Carretera Salinas Victoria Km. 2 s/n Salinas Victoria, Nuevo Leon, Mexico C.P. 65500 Tel: +52 (51) 1958-3790

Cod (Code):	FD-PR-01-05
Edicion (Edition):	Rev. 4
Date of Rev (Fecha Rev):	27 Nov 2018
Page (Hoja):	2/2

CUSTOMER (Cliente)		PURCHASE ORDER (Orden de Compra)		DELIVERY (Remision)		DATE (Fecha)		REFERENCE NUMBER (No. Referencia)							
ACEROS TEPOTZTLAN, S.A. DE C.V.		002-002063-1		5042132		01/29/2020		05122019-9207							
PIPE TYPE PRODUCT (Tipo de producto)	FORZA WORK ORDER (QIF)	SIZE (Diámetro)	WALL THICKNESS (Espesor)	HEAT (No. Colada)	SPECIFICATI ON (Especificación Norma)	GRADE (Grado)	LENGTH (Longitud)	MASS (Peso Unitario)	MASS PER METER (Peso Lineal kg x metros)	HYDROSTATIC TEST (Pruebas Hidrostaticas (psi))	SPECIAL REQUIREMENTS (Requerimientos especiales)	TUBE NUMBER (No. Piezas)			
HSS	QIF 3033	4x4	0.375	D19601401	ASTM A500	B	12.20	40.03	28.09	N/A	N/A	31			
HSS	QIF 3033	4x4	0.375	D19601215	ASTM A500	B	12.20	40.03	28.09	N/A	N/A	1			
HSS	QIF 3033	4x4	0.375	D19701339	ASTM A500	B	12.20	40.03	28.09	N/A	N/A	4			
HSS	QIF 3033	4x4	0.375	D19701343	ASTM A500	B	12.20	40.03	28.09	N/A	N/A	17			
HSS	QIF 3033	4x4	0.375	D19801287	ASTM A500	B	12.20	40.03	28.09	N/A	N/A	58			
<p>303-75-10, 3033-61-4, 3033-59-16, 3033-58-13, 3033-56-17, 3033-74-17, 3033-56-8, 3033-58-4, 3033-58-14, 3033-58-9, 3033-74-18, 3033-58-18, 3033-62-15, 3033-61-6, 3033-61-3, 3033-72-17, 3033-61-8, 3033-59-7, 3033-74-1, 3033-74-4, 3033-73-6, 3033-62-3, 3033-75-17, 3033-72-20, 3033-72-18, 3033-73-3, 3033-60-21, 3033-74-16, 3033-75-1, 3033-58-11, 3033-74-15, 3033-58-12, 3033-58-16, 3033-58-6, 3033-61-10, 3033-62-2, 3033-58-15, 3033-61-16, 3033-62-17, 3033-62-18, 3033-62-4, 3033-62-4, 3033-74-20, 3033-75-4, 3033-74-13, 3033-62-4, 3033-62-4, 3033-49-18, 3033-75-7, 3033-61-7, 3033-61-7, 3033-75-8, 3033-75-11, 3033-73-5, 3033-73-12, 3033-73-4, 3033-75-11, 3033-58-19, 3033-72-16, 3033-75-15, 3033-73-18, 3033-73-17, 3033-74-11, 3033-73-19, 3033-73-19, 3033-73-13, 3033-73-14, 3033-73-20, 3033-73-16, 3033-74-3, 3033-74-2, 3033-74-7, 3033-75-8, 3033-75-11, 3033-73-5, 3033-73-12, 3033-73-4, 3033-73-4, 3033-75-18, 3033-73-1, 3033-73-9, 3033-75-13, 3033-75-12, 3033-73-10, 3033-61-2, 3033-74-9, 3033-61-17, 3033-75-5, 3033-62-2, 3033-61-5, 3033-74-14, 3033-62-10, 3033-75-2, 3033-62-13, 3033-62-20, 3033-62-7, 3033-75-9, 3033-74-19, 3033-62-9, 3033-74-4</p>															
Chemical Analysis (Analisis Quimico)															
Heat (Colada)	C	Si	Mn	P	S	V	Cr	Cu	Ni	Mo	Yield Strength (KSI) (Límite elastico)	Tensile Strength (KSI) (Tensión)	Tensile Strength (KSI) (Tensión)	Elongation (%) (Elongación)	Puebas No Destructivas UT N10
D19601401	0.139	0.156	0.259	0.028	0.013	0.002	0.023	0.011	0.008	0.001	86.20	81.60	N/A	27	N/A
D19601215	0.134	0.171	0.250	0.009	0.007	0.002	0.023	0.012	0.009	0.001	57.10	72.00	N/A	29	N/A
D19701339	0.155	0.174	0.278	0.024	0.010	0.003	0.024	0.017	0.010	0.003	57.70	78.10	N/A	28	N/A
D19701343	0.151	0.168	0.266	0.026	0.007	0.003	0.026	0.016	0.007	0.001	59.80	76.70	N/A	30	N/A
D19801287	0.137	0.162	0.243	0.013	0.009	0.003	0.023	0.011	0.009	0.003	58.30	77.60	N/A	30	N/A
Mechanical Test (Pruebas mecanicas)															
Certify By (Autorizo)											Elongation (%) (Elongación)		Puebas No Destructivas UT N10		
<p>Forza Steel certifies that the products described in this document were manufactured in compliance with the requirements of the specification described, obtaining satisfactory results satisfactorios en todas sus pruebas e inspecciones incluidas en los planes de calidad de Forza Steel para cumplir con los requerimientos del pedido en referencia.</p> <p>Forza Steel certifies that the products described in this document were manufactured in compliance with the requirements of the specification described, obtaining satisfactory results in all test and inspections included in the quality plans of Forza Steel to meet the requirements of the order in reference.</p>											27		N/A		
<p>Ing. Edkar Eduardo Olivo Hernández</p> <p>QUALITY ASSURANCE MANAGER</p>											28		N/A		
<p>30</p>											30		N/A		
<p>30</p>											30		N/A		