



MATERIAL TEST REPORT - QUALITY MANAGEMENT SYSTEM

FORZA STEEL - PRODUCTION FACILITY :

Carretera Salinas Victoria K.m. 2 s/n Salinas Victoria, Nuevo León , México C.P. 65500 Tel: +52 (51) 1958-3780

Packing List	0	Cod (Code):	FPD-PR-01-06
		Edición (Edición):	0
		Date of Rev (Fecha Rev) :	27 Nov 2018
		Page (Hoja):	1/1

CUSTOMER (Cliente)					PURCHASE ORDER (Orden de Compra)			DELIVERY (Remisión)			DATE (Fecha)		REFERENCE NUMBER (No. Referencia)	
PLESA ANAHUAC Y CIAS., S.A DE C.V.					30528			5050214			16/12/2020		15122020-16044	
PIPE TYPE PRODUCT (Tipo de producto)	FORZA WORK ORDER (OIF)	SIZE (Diámetro)	WALL THICKNESS (Espesor)	HEAT (No. Colada)	SPECIFICATI ON (Especificació n Norma)	GRADE (Grado)	LENGTH (Longitud)		MASS (Peso Unitario)		MASS PER METER (Peso Lineal kg x metros)	HYDROSTATIC TEST (Prueba Hidrostatica (psi))	SPECIAL REQUIREMENTS (Requerimientos especiales)	TUBE NUMBER (No. Piezas)
							Metros	Pies	Lbs	Kg				
ERW	OIF 2031	10.750	0.307	18118506	ASTM A53	B	6.20	20.34	691.59	313.70	51.46	1219	Barnizado	12
ERW	OIF 2031	10.750	0.307	18118507	ASTM A53	B	6.20	20.34	691.59	313.70	51.46	1219	Barnizado	10
ERW	OIF 2031	10.750	0.307	18118508	ASTM A53	B	6.20	20.34	691.59	313.70	51.46	1219	Barnizado	14
ERW	OIF 2031	10.750	0.307	18118509	ASTM A53	B	6.20	20.34	691.59	313.70	51.46	1219	Barnizado	32
ERW	OIF 2031	10.750	0.307	18118510	ASTM A53	B	6.20	20.34	691.59	313.70	51.46	1219	Barnizado	4
ERW	OIF 2031	10.750	0.307	18339870	ASTM A53	B	6.20	20.34	691.59	313.70	51.46	1219	Barnizado	2
ERW	OIF 2031	10.750	0.307	18339871	ASTM A53	B	6.20	20.34	691.59	313.70	51.46	1219	Barnizado	18
ERW	OIF 970	10.750	0.307	B1803020	ASTM A53	B	6.20	20.34	691.59	313.70	51.46	1219	Barnizado	6
ERW	OIF 970	10.750	0.307	B2803165	ASTM A53	B	6.20	20.34	691.59	313.70	51.46	1219	Barnizado	2

Tube (Lots) 2031-20-3A,2031-28-9A,970-2-6B,970-9-4A,2031-26-7A,2031-26-9B,2031-20-3B,2031-4-12A,2031-28-2A,2031-35-13A,2031-26-3A,2031-14-20A,970-1-14B,970-1-14A,970-9-4B,2031-3-14A,2031-35-20B,2031-7-2B,2031-28-8B,2031-26-10A,2031-18-16A,2031-25-10A,2031-30-16B,2031-30-5B,2031-28-10B,2031-31-9B,2031-7-2A,2031-28-8A,2031-26-9A,970-2-6A,2031-31-6A,2031-12-14A,2031-26-7B,2031-29-21B,2031-26-14A,2031-26-13A,2031-31-9A,2031-30-17A,2031-3-15A,2031-3-15B,2031-12-15A,2031-12-15B,2031-28-1B,2031-28-2B,2031-13-10A,2031-30-5A,2031-8-2B,2031-4-12B,2031-13-10B,2031-3-14B,2031-35-13B,2031-30-16A,2031-8-12A,2031-18-16B,2031-26-6A,2031-26-6B,2031-12-14B,2031-14-20B,2031-35-20A,2031-29-8A,2031-25-10B,2031-26-10B,2031-28-1A,2031-12-3B,2031-32-3B,2031-20-16B,2031-20-16A,970-3-4A,2031-7-21B,2031-32-3A,2031-7-14A,2031-30-17B,2031-26-14B,2031-28-7A,2031-27-4B,2031-26-13B,2031-28-10A,2031-8-12B,2031-29-21A,2031-28-7B,2031-27-4A,2031-30-4A,2031-8-2A,2031-28-9B,2031-26-3B,2031-6-2B,2031-31-6B,2031-29-8B,2031-5-21B,2031-28-11B,2031-30-4B,2031-28-11A,2031-12-3A,2031-6-2A,2031-33-1B,970-3-4B,2031-7-21A,2031-33-1A,2031-5-21A,2031-7-14B

Chemical Analyses (Análisis Químico)											Mechanical Test (Pruebas mecánicas)					
Heat (Colada)	C	Si	Mn	P	S	V	Cr	Cu	Ni	Mo	MB		W		Elongation (%) (Elongación)	Pruebas No Destructivas UT N10
											Yield Strength (KSI) (Límite elástico)	Tensile Strength (KSI) (Última tensión)	Tensile Strength(KSI) Última Tensión			
18118506	0.112	0.233	0.857	0.015	0.003	0.003	0.036	0.071	0.041	0.001	46.40	61.60	N/A		39	N/A
18118507	0.067	0.243	0.850	0.013	0.007	0.002	0.032	0.078	0.037	0.005	53.00	69.60	N/A		39	N/A
18118508	0.134	0.249	0.880	0.025	0.007	0.004	0.050	0.075	0.048	0.005	51.30	67.10	N/A		40	N/A
18118509	0.108	0.234	0.815	0.015	0.005	0.003	0.030	0.054	0.036	0.002	52.50	66.20	71.20		38	ACCEPTED
18118510	0.131	0.346	0.851	0.019	0.009	0.003	0.053	0.099	0.064	0.009	47.50	63.40	67.30		37	ACCEPTED
18339870	0.149	0.236	0.832	0.025	0.006	0.004	0.090	0.079	0.050	0.025	54.00	70.60	74.60		39	ACCEPTED
18339871	0.128	0.347	0.887	0.011	0.011	0.003	0.034	0.010	0.035	0.003	50.10	67.40	70.70		38	ACCEPTED
B1803020	0.072	0.164	0.955	0.011	0.003	0.009	0.048	0.015	0.024	0.001	57.40	70.50	N/A		39	N/A
B2803165	0.064	0.136	0.907	0.007	0.004	0.009	0.047	0.016	0.025	0.001	58.50	72.20	N/A		40	N/A

Forza Steel certifica que los productos descritos en este documento fueron fabricados en cumplimiento con los requerimientos de la especificacion descrita, obteniendo resultados 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.

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 tests and inspections included in the quality plans of Forza Steel to meet the requirements of the order in reference.

Certify By (Autorizó)

Ing. Edgar Eduardo Olivo Hernández
Control de Calidad y Laboratorio (Responsable)



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