



**MATERIAL TEST REPORT - QUALITY MANAGEMENT SYSTEM**

FORZA STEEL - PRODUCTION FACILITY :

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

Packing List	0	Cod (Code):	FPD-PR-01-06
		Edition (Edición):	0
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CUSTOMER (Cliente)					PURCHASE ORDER (Orden de Compra)			DELIVERY (Remisión)			DATE (Fecha)		REFERENCE NUMBER (No. Referencia)	
PLESA ANAHUAC Y CIAS., S.A DE C.V.					30460			5049875			01/12/2020		30112020-15773	
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 2012	6.625	0.250	D18702626	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	2
ERW	OIF 2012	6.625	0.250	D18702631	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	2
ERW	OIF 903	6.625	0.250	D18702626	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	2
ERW	OIF 903	6.625	0.250	D18802336	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	2
ERW	OIF 991	6.625	0.250	D18508050	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	18
ERW	OIF 991	6.625	0.250	D18508059	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	10
ERW	OIF 991	6.625	0.250	D18608136	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	16
ERW	OIF 991	6.625	0.250	D18608138	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	54
ERW	OIF 991	6.625	0.250	D18608140	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	22
ERW	OIF 991	6.625	0.250	D18608148	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	3
ERW	OIF 991	6.625	0.250	D18707886	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	41
ERW	OIF 991	6.625	0.250	D18807405	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	3
ERW	OIF 991	6.625	0.250	D18807408	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	16

Tub e (L ot es ) 991-16-26B,991-70-7B,991-15-23B,991-39-28A,991-68-10B,991-68-16A,991-70-7A,991-6-2A,991-52-28B,991-54-4B,991-52-28A,991-15-9B,991-48-5B,991-69-7A,991-51-3B,991-55-29A,991-54-4A,991-18-20A,991-53-8B,991-68-10A,991-16-14A,991-48-24B,991-16-14B,991-52-17B,991-46-14B,991-47-25B,991-8-4A,991-18-22B,991-16-26A,991-69-11B,991-51-3A,991-18-22A,991-14-2B,991-64-26B,991-14-22A,991-5-4A,991-43-27B,991-8-6A,991-8-6B,991-44-2B,991-64-26A,991-8-4B,991-43-4B,2012-31-10B,991-3-10A,991-81-29B,991-8-13B,991-75-25A,991-47-9B,991-53-24B,991-10-12B,991-65-1A,2012-17-10A,991-50-13A,991-9-26B,991-64-6-1B,991-18-18A,991-13-23A,991-4-20A,991-53-21A,991-10-12A,991-43-4A,991-46-12B,991-3-10B,991-2-14B,991-45-12A,991-40-28B,991-78-20A,991-75-3B,991-44-2A,991-12-17B,991-47-25A,991-68-16B,991-16-16B,991-48-24A,991-75-25B,991-10-7B,991-52-12A,991-69-29B,991-4-20B,991-53-2B,991-42-24B,991-62-11A,991-48-28A,991-12-17A,991-34-12A,991-5-5B,991-46-12A,991-15-22B,991-45-19A,991-15-21A,991-53-28A,991-48-28B,991-40-28A,991-44-10A,991-53-28B,991-44-10B,991-65-1B,991-69-29A,991-16-16A,991-18-20B,991-10-10A,991-26-20A,991-55-9A,991-44-17A,991-19-16B,991-12-12B,991-48-5A,991-39-28B,991-43-27A,991-5-8A,991-42-24A,991-5-3A,991-53-8A,991-16-21B,991-81-29A,991-14-9B,991-69-7B,991-55-29B,991-10-17A,991-11-23A,991-15-23A,991-11-23B,991-14-9A,991-53-24A,991-10-19B,991-19-18B,991-8-13A,991-15-9A,991-46-14A,991-16-29B,991-52-17A,991-59-28A,991-10-19A,991-10-17B,991-16-21A,991-26-20B,991-19-18A,991-46-8B,991-5-3B,991-47-9A,991-5-8B,991-47-8B,991-14-22B,991-16-29A,991-69-11A,991-14-2A,991-18-18B,991-45-22A,991-5-5A,991-45-19B,991-70-3B,991-34-12B,991-53-2A,991-46-8A,991-15-21B,991-49-14A,991-10-7A,991-47-8A,2012-31-10A,991-70-3A,991-52-12B,991-59-28B,991-62-11B,991-15-22A,991-54-8B,991-53-21B,991-12-12A,991-18-26B,991-64-6-1A,991-44-17B,991-9-26A,991-45-12B,991-11-6B,991-10-24A,991-10-24B,991-62-16A,991-19-16A,991-18-26A,991-81-26B,991-45-22B,991-81-26A,991-49-14B,991-50-13B,991-10-10B,991-54-8A,991-78-20B,991-62-16B,2012-17-10B,991-13-23B,991-55-9B

Heat (Colada)	Chemical Analyses (Análisis Químico)										Mechanical Test (Pruebas mecánicas)					
	C	Si	Mn	P	S	V	Cr	Cu	Ni	Mo	MB		W		Elongation (%) (Elongación)	Pruebas No Destructivas UT N10
											Yield Strength (KSI) (Limite elástico)	Tensile Strength (KSI) (Última tensión)	Tensile Strength (KSI) (Última Tensión)			
D18702626	0.138	0.133	0.277	0.014	0.0064	0.0440	0.017	0.027	0.017	0.018	63.90	80.50	N/A	31	ACCEPTED	
D18702626	0.138	0.133	0.277	0.014	0.0064	0.0440	0.017	0.027	0.017	0.018	63.90	80.50	N/A	31	ACCEPTED	
D18702631	0.141	0.107	0.255	0.018	0.0058	0.0046	0.021	0.022	0.017	0.019	60.60	68.20	N/A	38	ACCEPTED	
D18702626	0.138	0.133	0.277	0.014	0.0064	0.0440	0.017	0.027	0.017	0.018	63.90	80.50	N/A	31	ACCEPTED	
D18702626	0.138	0.133	0.277	0.014	0.0064	0.0440	0.017	0.027	0.017	0.018	63.90	80.50	N/A	31	ACCEPTED	
D18802336	0.16	0.119	0.3	0.018	0.0079	0.044	0.021	0.018	0.0056	0.0067	66.90	70.10	N/A	30	ACCEPTED	
D18508050	0.151	0.135	0.297	0.017	0.0027	0.0023	0.037	0.025	0.0084	0.001	67.90	89.40	N/A	31	ACCEPTED	
D18508059	0.154	0.105	0.291	0.017	0.0022	0.0016	0.040	0.016	0.0058	0.0010	57.40	77.10	N/A	34	ACCEPTED	
D18608136	0.142	0.145	0.280	0.014	0.005	0.0019	0.025	0.021	0.0065	0.001	62.70	88.30	N/A	30	ACCEPTED	
D18608138	0.153	0.143	0.265	0.015	0.003	0.0029	0.028	0.021	0.0037	0.001	68.20	77.40	N/A	35	ACCEPTED	
D18608140	0.158	0.133	0.277	0.016	0.0028	0.0025	0.028	0.023	0.0069	0.001	74.00	82.50	N/A	33	ACCEPTED	
D18608148	0.162	0.18	0.288	0.011	0.0031	0.0017	0.025	0.017	0.003	0.001	67.60	85.70	N/A	31	ACCEPTED	
D18707886	0.168	0.117	0.283	0.021	0.0018	0.0024	0.037	0.019	0.0034	0.001	60.10	88.00	N/A	30	ACCEPTED	
D18807405	0.150	0.167	0.290	0.010	0.0031	0.0015	0.023	0.016	0.0046	0.001	73.60	83.10	N/A	32	ACCEPTED	
D18807408	0.164	0.186	0.296	0.011	0.0031	0.0017	0.023	0.016	0.0064	0.001	68.80	83.00	N/A	34	ACCEPTED	

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

Certify By (Autorizó)

sus pruebas e inspecciones incluidas en los planes de calidad de forza steel para cumplir con los requerimientos del pedido en referencia.

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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.



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



**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
		Edition (Edición):	0
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		Page (Hoja):	2/2

CUSTOMER (Cliente)					PURCHASE ORDER (Orden de Compra)			DELIVERY (Remisión)			DATE (Fecha)		REFERENCE NUMBER (No. Referencia)	
PLESA ANAHUAC Y CIAS., S.A DE C.V.					30460			5049875			01/12/2020		30112020-15773	
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 2012	6.625	0.250	D18702626	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	2
ERW	OIF 2012	6.625	0.250	D18702631	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	2
ERW	OIF 903	6.625	0.250	D18702626	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	2
ERW	OIF 903	6.625	0.250	D18802336	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	2
ERW	OIF 991	6.625	0.250	D18508050	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	18
ERW	OIF 991	6.625	0.250	D18508059	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	10
ERW	OIF 991	6.625	0.250	D18608136	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	16
ERW	OIF 991	6.625	0.250	D18608138	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	54
ERW	OIF 991	6.625	0.250	D18608140	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	22
ERW	OIF 991	6.625	0.250	D18608148	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	3
ERW	OIF 991	6.625	0.250	D18707886	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	41
ERW	OIF 991	6.625	0.250	D18807405	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	3
ERW	OIF 991	6.625	0.250	D18807408	ASTM A53	B	6.20	20.34	340.82	154.59	25.36	1611	Barnizado	16

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Heat (Colada)	Chemical Analyses (Análisis Químico)											Mechanical Test (Pruebas mecánicas)				
	C	Si	Mn	P	S	V	Cr	Cu	Ni	Mo	MB		W		Elongation (%) (Elongación)	Pruebas No Destructivas UT N10
											Yield Strength (KSI) (Limite elástico)	Tensile Strength (KSI) (Última tensión)	Tensile Strength (KSI) (Última Tensión)			
D18702626	0.138	0.133	0.277	0.014	0.0064	0.0440	0.017	0.027	0.017	0.018	63.90	80.50	N/A	31	ACCEPTED	
D18702626	0.138	0.133	0.277	0.014	0.0064	0.0440	0.017	0.027	0.017	0.018	63.90	80.50	N/A	31	ACCEPTED	
D18702631	0.141	0.107	0.255	0.018	0.0058	0.0046	0.021	0.022	0.017	0.019	60.60	68.20	N/A	38	ACCEPTED	
D18702626	0.138	0.133	0.277	0.014	0.0064	0.0440	0.017	0.027	0.017	0.018	63.90	80.50	N/A	31	ACCEPTED	
D18702626	0.138	0.133	0.277	0.014	0.0064	0.0440	0.017	0.027	0.017	0.018	63.90	80.50	N/A	31	ACCEPTED	
D18802336	0.16	0.119	0.3	0.018	0.0079	0.044	0.021	0.018	0.0056	0.0067	66.90	70.10	N/A	30	ACCEPTED	
D18508050	0.151	0.135	0.297	0.017	0.0027	0.0023	0.037	0.025	0.0084	0.001	67.90	89.40	N/A	31	ACCEPTED	
D18508059	0.154	0.105	0.291	0.017	0.0022	0.0016	0.040	0.016	0.0058	0.0010	57.40	77.10	N/A	34	ACCEPTED	
D18608136	0.142	0.145	0.280	0.014	0.005	0.0019	0.025	0.021	0.0065	0.001	62.70	88.30	N/A	30	ACCEPTED	
D18608138	0.153	0.143	0.265	0.015	0.003	0.0029	0.028	0.021	0.0037	0.001	68.20	77.40	N/A	35	ACCEPTED	
D18608140	0.158	0.133	0.277	0.016	0.0028	0.0025	0.028	0.023	0.0069	0.001	74.00	82.50	N/A	33	ACCEPTED	
D18608148	0.162	0.18	0.288	0.011	0.0031	0.0017	0.025	0.017	0.003	0.001	67.60	85.70	N/A	31	ACCEPTED	
D18707886	0.168	0.117	0.283	0.021	0.0018	0.0024	0.037	0.019	0.0034	0.001	60.10	88.00	N/A	30	ACCEPTED	
D18807405	0.150	0.167	0.290	0.010	0.0031	0.0015	0.023	0.016	0.0046	0.001	73.60	83.10	N/A	32	ACCEPTED	
D18807408	0.164	0.186	0.296	0.011	0.0031	0.0017	0.023	0.016	0.0064	0.001	68.80	83.00	N/A	34	ACCEPTED	

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

Certify By (Autorizó)

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.



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