



## REPORTE DE CALIDAD DE TUBERIA (Quality Report)

Cod: FPD-PR-01-06

SISTEMA DE GESTION DE LA CALIDAD

Edición : 0      Revision: 4

Fecha de Rev: 15 Junio 2013

REPORTE FS  
(Report No.)

29/08/2013

-1

Tipo de Producto (Type of Pipe/Delivery Condition):	Orden Interna de Fabricacion (Work Order)	Diámetro (Diameter)	Medida (Size)	Espesor (Thickness) pulg (ft)	Espesor (Thickness) pulg (mm)	Longitud (Length) mtrs	Longitud (Length) pies (ft)	Norma (Specification):	Grado (Grade):	Peso (mass) lbs.	Peso (mass) kg.	Tamaño (Size)	Peso Lineal (Mass per meter) lbs. X pie	Peso Lineal (Mass per meter) kg. X mtr.	Numeros de Tubo (Pipe Number)					
																Composición Química del Acero (Steel Chemical Composition).				
# lote	# colada (Heat).	C	Si	Mn	P	S	V	B	Cr	Cu	Ni	Mo	Ciiw	Límite Traccion (Tensile Strength) KSI (MPA)			Límite Elastico (Yield Point) KSI (MPA)		% Elongación (Elongation)	
														L	T	W	L	T	L	T
HSS	300	7.284	6 X 6	0.375	9.525	12.2	40.026	ASTM A-500	Grado B	1108.52429	502.8181584	0.185	27.69493464	41.21460315	63					
300-6-10	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-6-11	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-6-12	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-6-13	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-6-14	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-6-15	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-6-16	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-6-17	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-6-18	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-6-19	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-6-2	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-6-20	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-6-3	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-6-4	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-6-5	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-6-6	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-6-7	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-6-8	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-6-9	1305200850	0.062	0.014	0.779	0.007	0.003	0	0	0	0	0	0	0.10141667	70.58(485.40)	N/A	N/A	60.69(417.38)	N/A	38	N/A
300-7-10	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-7-11	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-7-12	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-7-13	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-7-14	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-7-15	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-7-17	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-7-2	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-7-3	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-7-4	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-7-5	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-7-6	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-7-7	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-7-8	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-7-9	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A





## REPORTE DE CALIDAD DE TUBERIA ( Quality Report )

Cod: FPD-PR-01-06

### SISTEMA DE GESTION DE LA CALIDAD

Edición : 0      Revisión: 4

Fecha de Rev: 15 Junio 2013

300-8-10	1305114890 ✓	0.055	0.019	0.773	0.008	0.004	0	0	0	0	0	0	0.09428333	72.01(495.24)	N/A	N/A	62.83(432.10)	N/A	38	N/A
300-8-11	1305114890	0.055	0.019	0.773	0.008	0.004	0	0	0	0	0	0	0.09428333	72.01(495.24)	N/A	N/A	62.83(432.10)	N/A	38	N/A
300-8-12	1305114890	0.055	0.019	0.773	0.008	0.004	0	0	0	0	0	0	0.09428333	72.01(495.24)	N/A	N/A	62.83(432.10)	N/A	38	N/A
300-8-13	1305114890	0.055	0.019	0.773	0.008	0.004	0	0	0	0	0	0	0.09428333	72.01(495.24)	N/A	N/A	62.83(432.10)	N/A	38	N/A
300-8-14	1305114890	0.055	0.019	0.773	0.008	0.004	0	0	0	0	0	0	0.09428333	72.01(495.24)	N/A	N/A	62.83(432.10)	N/A	38	N/A
300-8-15	1305114890	0.055	0.019	0.773	0.008	0.004	0	0	0	0	0	0	0.09428333	72.01(495.24)	N/A	N/A	62.83(432.10)	N/A	38	N/A
300-8-16	1305114890	0.055	0.019	0.773	0.008	0.004	0	0	0	0	0	0	0.09428333	72.01(495.24)	N/A	N/A	62.83(432.10)	N/A	38	N/A
300-8-17	1305114890	0.055	0.019	0.773	0.008	0.004	0	0	0	0	0	0	0.09428333	72.01(495.24)	N/A	N/A	62.83(432.10)	N/A	38	N/A
300-8-18	1305114890	0.055	0.019	0.773	0.008	0.004	0	0	0	0	0	0	0.09428333	72.01(495.24)	N/A	N/A	62.83(432.10)	N/A	38	N/A
300-8-19	1305114890	0.055	0.019	0.773	0.008	0.004	0	0	0	0	0	0	0.09428333	72.01(495.24)	N/A	N/A	62.83(432.10)	N/A	38	N/A
300-8-20	1305114890	0.055	0.019	0.773	0.008	0.004	0	0	0	0	0	0	0.09428333	72.01(495.24)	N/A	N/A	62.83(432.10)	N/A	38	N/A
300-8-21	1305114890	0.055	0.019	0.773	0.008	0.004	0	0	0	0	0	0	0.09428333	72.01(495.24)	N/A	N/A	62.83(432.10)	N/A	38	N/A
300-8-4	1305114890	0.055	0.019	0.773	0.008	0.004	0	0	0	0	0	0	0.09428333	72.01(495.24)	N/A	N/A	62.83(432.10)	N/A	38	N/A
300-8-5	1305114890	0.055	0.019	0.773	0.008	0.004	0	0	0	0	0	0	0.09428333	72.01(495.24)	N/A	N/A	62.83(432.10)	N/A	38	N/A
300-8-6	1305114890	0.055	0.019	0.773	0.008	0.004	0	0	0	0	0	0	0.09428333	72.01(495.24)	N/A	N/A	62.83(432.10)	N/A	38	N/A
300-8-7	1305114890	0.055	0.019	0.773	0.008	0.004	0	0	0	0	0	0	0.09428333	72.01(495.24)	N/A	N/A	62.83(432.10)	N/A	38	N/A
300-8-8	1305114890	0.055	0.019	0.773	0.008	0.004	0	0	0	0	0	0	0.09428333	72.01(495.24)	N/A	N/A	62.83(432.10)	N/A	38	N/A
300-8-9	1305114890	0.055	0.019	0.773	0.008	0.004	0	0	0	0	0	0	0.09428333	72.01(495.24)	N/A	N/A	62.83(432.10)	N/A	38	N/A
300-9-10	1305200840 ✓	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-9-11	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-9-13	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-9-14	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-9-2	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-9-3	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-9-4	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-9-5	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-9-6	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-9-7	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A
300-9-8	1305200840	0.068	0.018	0.755	0.007	0.002	0	0	0	0	0	0	0.10635	72.82(500.81)	N/A	N/A	63.34(435.61)	N/A	31	N/A

**Prueba Hidros. (PSI)  
(Hydrostatic Test).**

**Tratamiento Térmico  
(Heat Treatment).**

**Pruebas de Laboratorio Propiedades Mecánicas( Mechanical test Results )**

Presión (Pressure).	Duración (Time).	Tipo (Type).	T°C mín. (Temp).	Metalografía	Método de Inspección No Destructiva ( Non destructive Test Method ).	Indicadores de Referencia (Reference Indicator)	Resultado de Macrografía (Macrographic test Result)	Prueba de Aplastamiento (Flattening Test)	Resultado de Prueba de Impacto (Charpy Test) Metal Base (Base Metal). Prom(Average).	Temperatura de Prueba de Impacto (Charpy Test Temperature).	Doblez Guiado ( Bending Test ) (QW-160)
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Este certificado ampara los números de serie de los tubos manifestados, los cuales fueron fabricados, inspeccionados y aceptados de acuerdo a los requerimientos de la especificación arriba mencionada; FORZA STEEL no garantiza el producto que sea utilizado inapropiadamente

Elaboró:

\_\_\_\_\_  
Beatriz Aguirre.

Autorizó:

Ing. Mónica Botello Elizondo  
ibotello@forzasteel.com  
Aseguramiento de Calidad (Quality Assurance Chief)  
FORZASTEEL S.A. DE C.V.  
Carretera Salinas Victoria N.L. C.P. 65500