



Mill Test Certificate

Bri-Steel Manufacturing

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Product: **Seamless Alloy Steel Pipe**

Product Heat Number: **BSM-2582**

Product Size: **NPS 36 x 0.891 inch WT**

Production Date: **November 16, 2015**

MTR **2014**

Production Method: **Hot Expansion**

Product Heat Treatment: **Annealed (890°C) and Tempered (760°C)**

Product Standards: **ASME B36.10M-2015, ASTM A335-2015/ASME SA335-2015 GRADE P22**

Product Markings: **BRI-STEEL MFG NPS 36 x 0.891 INCHWT (0.780 min. WT) ASTM/ASME A/SA335 GR. P22 NDE(UT) 900PSI SMLS 2015/11**

HEAT BSM-2582 (PIPE# LENGTH MASS) 334.1 lb/ft MADE IN CANADA

Product Details				Non-Destructive Testing										
Heat	Test Type	Product Size*	Pieces	Length	Mass lb/ft	Geiger μ R/hr	Res. Mag. Gauss	Visual Insp.	OD	UT WT	UT	ET	HydroTest	End Condition
BSM-2582	Heat	NPS 36 x 0.891 inch WT	17	DRL	334.10	<5	<20	Pass	Pass	Pass	Pass	Pass	Pass	Plain End

Chemical Analysis (wt%)																	
Heat	Steelmaking Method	Analysis	C	Mn	P	S	Si	Cr	Cu	Mo	Ni	V	Ti	Nb	B	CE (IIW)	CE (CSA)
BSM-2582	Blast Furnace; EAF; Ladle Refining; Vacuum Degass; Fully Killed	Heat	0.11	0.47	0.009	0.003	0.24	2.26	0.02	0.93	0.03	0.014	0.001	0.001	0.0001	0.83	0.62
		Product	0.11	0.47	0.011	0.004	0.22	2.22	0.02	0.99	0.03	0.012	0.001	0.003	0.0004	0.84	0.63
		Product	0.10	0.46	0.012	0.003	0.21	2.20	0.02	0.96	0.03	0.011	0.001	0.003	0.0004	0.81	0.57

Mechanical Properties										
Heat	Test Type	Microstructure	Hardness HRBW	Flattening Test	Tension Test		Yield (Rt0.5) psi	Tensile (Rm) psi	Y/T (Rt0.5/Rm)	Elongation (A) %
					50mm GL	Longitudinal, 12.7mm Round Bar				
BSM-2582	Heat	Ferrite & Bainite	75	Pass	Pass	Longitudinal, 12.7mm Round Bar	41,500	71,600	0.65	39
								69,200	0.60	37

Additional Details:

- ✓ We hereby certify that this pipe product was manufactured, sampled, tested and inspected by Bri-Steel Manufacturing in accordance with ASTM/ASME A/SA335-2015, and the purchase order requirements, and that the results meet the corresponding requirements. Bri-Steel Manufacturing is registered and certified to ISO-9001:2008, API Q1 and PED 97/23/EC.
- ✓ This product has not come into contact with mercury during the Bri-Steel Manufacturing processes.
- ✓ This certificate represents a quality control system that is compliant with EN 10204:2004 Type 3.1.
- ✓ No weld repairs have been performed on this product.

Mill Test Certificate approved by:

Kenton Dechant
2015 Nov 25.

Kenton Dechant, P.Eng.
Manager of Quality and R&D