



Mill Test Certificate

Bri-Steel Manufacturing
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Product: Seamless Alloy Steel Pipe Product Heat Number: BSM-2781 Product Size: NPS 36 SCH30 Production Date: August 31, 2016
 Production Method: Hot Expansion Product Heat Treatment: Full Annealed (940°C) Certificate No: MTR-002939
 Product Standards: ASME B36.10M-2015, ASTM A335-2015a/ASME SA335-2015 GRADE P22

Product Markings:  BRI-STEEL MFG ASTM/ASME A/SA335 GR P22 NPS 36 SCH 30 (0.625 inchWT) SMLS
 HEAT BSM-2871 (PIPE # LENGTH MASS) 236.1 LB/FT NDE(UT) 650 PSI 2016/08 MADE IN CANADA.

Product Details				Non-Destructive Testing											
Heat	Test Type	Product Size	Pieces	Length	Mass	Geiger	Res. Mag.	Visual	UT	UT	ET	HydroTest	End		
BSM-2781	Heat	NPS 36 SCH30 0.625 inchWT	1	SRL	lb/ft	µR/hr	Gauss	Insp.	OD	WT	ASTM E213	ASTM E309	650 psi/5s	Condition	
					236.10	<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-2781	Blast Furnace; FAF; Ladle Refining; Vacuum Degass; Fully Killed	Heat	0.09	0.46	0.012	0.002	0.26	2.23	0.02	0.92	0.02	0.013	-	-	-	-	-
		Product	0.10	0.49	0.006	0.004	0.34	2.28	0.08	0.98	0.08	0.011	-	-	-	-	-

Mechanical Properties										
Heat	Test Type	Microstructure	Hardness	Flattening Test	Tension Test		Yield (Rt0.5)	Tensile (Rm)	Y/T (Rt0.5/Rm)	Elongation (A)
					50mm GL	12.7mm Round Bar				
BSM-2781	Heat	Ferrite & Bainite	77 HRBW	Pass	Longitudinal; 12.7mm Round Bar		48 900	73 100	0.67	36

Additional Details:
 ✓ We hereby certify that this pipe product was manufactured, sampled, tested and inspected by Bri-Steel Manufacturing in accordance with ASTM A335-2015a/ASME 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 2014/68/EU.

Mill Test Certificate approved by:


 2016 Aug 31

- ✓ 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.

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 Manager of Quality and R&D