



# Mill Test Certificate

**Bri-Steel Manufacturing Inc.**  
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Product: **Seamless Alloy Steel Pipe** Product Heat Number: **BSM-2592** Product Size: **NPS 30 STD** Production Date: **2015 November 30**

Production Method: **Hot Expansion** Product Heat Treatment: **Normalized (900°C) and Tempered (700°C)** MTR: **002020**

Product Standards: **ASME B36.10-2004, ASTM A335/ASME SA335-2015 GR P11**

Product Markings: **BRI-STEEL MFG NPS 30 STD 0.375 INCHWT SMLS 2015/11 NDE(UT) 450PSI**  
**HEAT BSM-2592 (PIPE# LENGTH MASS) 118.6lb/ft ASTM A335/ASME SA335 GR. P11 MADE IN CANADA.**

Product Details				Non-Destructive Testing										
Heat	Test Type	Product Size*	Pieces	Length	Mass lb/ft	Geiger μR/hr	Res.Mag. Gaus	Visual Insp.	OD	UT WT	UT ASTM E213	ET ASTM E309	HydroTest 450 psi/5s	End Condition
BSM-2592	Heat	NPS 30 STD 0.375 in. WT	8	DRL	118.60	<5	<20	Pass	Pass	Pass	Pass	-	Pass	32.5° Bevel


Chemical Analysis (wt%)																		
Heat	Steelmaking Method	Analysis	C	Mn	P	S	Si	Cr	Cu	Mo	Ni	V	Ti	Nb	B	CE (IIW)	CE (CSA)	
			Heat	0.10	0.53	0.011	0.002	0.74	1.35	0.05	0.52	0.03	0.010	-	-	-	-	-
			Product	0.10	0.51	0.009	0.003	0.81	1.41	0.05	0.51	0.03	0.006	0.005	0.002	0.0005	0.58	0.44
BSM-2592	Vacuum Degas: Fully Killed	Product	0.10	0.51	0.009	0.002	0.81	1.42	0.05	0.51	0.03	0.006	0.005	0.002	0.0005	0.58	0.44	

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: 38.1mm x WT	Longitudinal: 38.1mm x WT				
BSM-2592	Heat	Ferrite (50%) Bainite (40%) Pearlite (10%)	83	Pass	46,100	80,000	80,000	0.58	39		

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/S335-2015, 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:

  
 2015 Nov 30

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