



Mill Test Certificate

Bri-Steel Manufacturing Inc.
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Product: **Seamless Carbon Steel Pipe** Product Heat Number: **BSM-0080** Product Size: **NPS 24 STD** Production Date: **201 Nov 1**

Production Method: **Hot Expansion** Product Heat Treatment: **As-rolled**

Product Standards: **ASTM/ASME A/SA106-2010 Grade B, A/SA53-2010 Grade B Type S, NACE MR0175-2009**

Product Markings: **.BRI-STEEL MFG NPS 24 STD ASTM/ASME A/SA106 GR B A/SA53 GR B HEAT BSM-0080 (PIPE # LENGTH MASS) NDE 650PSI NACE MR0175 2011/11 MADE IN CANADA.**

Product Details						Non-Destructive Testing									
Heat	Test Type	NPS	SCH	Pieces	Length	Mass	Gelger µR/hr	Res. Mag. Gauss	Visual Insp.	OD	UT WT	UT ASTM E213	ET ASTM E309	HydroTest 650 psi/5s	End Condition
BSM-0080	Heat	24	STD	1	DRL	3132 LB	<5	<20	Pass	Pass	Pass	---	Pass	Pass	37.5° Bevel

Chemical Analysis (wt%)																		
Heat	Test Type	Steelmaking Method		C	Mn	P	S	Si	Cr	Cu	Mo	Ni	V	Ti	Nb	B	CE (IIV)	CE (CSA)
BSM-0080	Heat	Blast Furnace; EAF; Ladle Refining; Vacuum Degass		0.21	0.86	0.017	0.007	0.22	0.03	0.13	0.02	0.04	0.003	0.001	0.001	0.0002	0.37	0.38


Mechanical Properties										
Heat	Test Type	Microstructure	Hardness HRBW	Flattening Test	Tension Test		Yield (Rp0.5) psi	Yield (Rp0.2) psi	Tensile (Rm) psi	Elongation (A) %
BSM-0080	Heat	Ferrite & Pearlite	75	Pass	Transverse; 50mm GL; 38mm x WT		51,500	51,500	76,500	40

Additional Details:

- ✓ We hereby certify that this pipe product was manufactured, sampled, tested and inspected in accordance with ASTM/ASME A/SA106-2010, A/SA53-2010 and the purchase order requirements, and that the results meet the corresponding requirements.
- ✓ This pipe product meet the sour service requirements of NACE MR0175/ISO 15156-2:2009 Annex A2 for Region 3 Sour Service, and NACE MR0103-2010 Section 2.1.

Mill Test Certificate approved by:

- ✓ This certificate represents a quality control system that is compliant with EN 10204:2004 Type 3.1.


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