

Mill Test Certificate

Bri-Steel Manufacturing Inc. 2125-64 Avenue, Edmonton, AB Canada T6P 1Z4

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Seamless Carbon Steel Pipe Product Heat Number: BSM-1533 Product Size: 24 STD

Production Method:

Hot Expansion

Product Heat Treatment: As-rolled

Certificate No.: MTR- 000747

Production Date:

Jan 13, 2014

Product Standards: ASME B36.10-2004, ASTM/ASME A/SA106-2013 Grade B/C NDE, A/SA53-2012 Grade B Type S, NACE MR0175-2009 MR0103-2010

Product Markings BRI-STEEL NPS 24 STD 0.375 INCHWT SMLS 2014/01 NDE 750PSI

MEAT BSM-1533 (PIPE # LENGTH MASS) 94.62lb/ft ASTM/ASME A/SA106 GR B/C A/SA53 GR B NACE MR0175/MR0103 MADE IN CANADA

	BSM-1533 Heat NPS		Heat Test Type	
	NPS 24 STD 0.375in. WT		Product Size	Product: Details
	10		Pieces	
	DRL		Length	
	94.62	lb/ft	Mass	
	<5	μR/hr	Geiger	
	<10	Gauss	Res. Mag.	
	Pass	Insp.	Visual	
	Pass		OD	N
	Pass	WT	L	Non-Destructive Testing
The second secon	Pass	ASTM E213 ASTM	UT	tive Testing
	Pass	ASTM	ET	
	Pass	750 PSI/ 5 s	HydroTest	
	Plain End	5 s Condition	End	

		ВЗ		
		BSM-1533	Heat	
	Cegas, rully Niled	Blast Furnace; EAF; Ladle Refining; Vacuum	Steelmaking Method	
	Product	Heat	Test Type	
	0.20	0.19	С	
	0.90	0.91	Mn	
	0.017	0.016	Р	
	0.008	0.006	S	Chemical Analysis (wt%)
-	0.23	0.22	Si	Analysis (1
	0.05	0.04	Cr	wt%)
	0.06	0.07	Cu	
	0.03	0.03	Mo	
	0.03	0.03	Z.	
	0.004		<	
	0.001	C.	Π	
	0.001		Nb	
	0.0003	0.0005	В	
	75.0	T	CE(IIW)	
	0.37	1	CE(CSA)	

BSM-1533		Heat T	
Heat		Test Type	
Ferrite & Pearlite		Microstructure	
74 HRBW		Hardness	
Pass		Flattening Test	
Longitudinal; 38.1 mm x WT	50mm GL	Tension Test	Mechanical Properties
44,000	psi	Yield (Rt0.5)	
71,500	psi	Tensile (Rm)	
0.62	(Rt0.5/Rm)	٧/٦	
46	%	Elongation (A)	

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AVG	mm	mm	mm	AVG	%	%	%	AVG	_	_	_	റ്	Sample Details	Standard	
	xpansion	Lateral Expansion			% Shear	% S			t Energy	Impact		Temp	Impact Test	Test	Heat

Additional Details:

- 🗸 We hereby certify that this pipe product was manufactured, sampled, tested and inspected by Bri-Steel Manufacturing Inc. in results meet the corresponding requirements. accordance with ASTM/ASME A/SA106-2013 Grade B/C A/SA53-2012, and the purchase order requirements, and that the
- √ This pipe product meets the sour service requirements of NACE MR0175/ISO 15156-2:2009 Annex A2 for Region 3 Sour Service-2009 NACE MR0103-2010 Section 2.1
- ✓ No weld repairs have been performed on this product.
- ✓ This product has not come into contact with mercury during the Bri-Steel Manufacturing processes.
- \checkmark This certificate represents a quality control system that is compliant with EN 10204:2004 Type 3.1.

Mill Test Certificate approved by:

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Paul Sowden, T.T. Assistant QA Manager