

Mill Test Certificate

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

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Product Size: 26STD Production Date: Mar 02, 2015

Certificate No.: MTR-001612

ASME B36.10-2004, API 5L-45th Ed. Grade B PSL1, ASTM/ASME A106-2014/SA106-2013 Grade B/C NDE, A53-2012/SA53-2013 Grade B Type S, NACE MR0175-2009 MR0103-2012

Product Markings

Product Standards: Production Method: Product:

Seamless Carbon Steel Pipe

Product Heat Number:

BSM-2272

Product Heat Treatment:

As-rolled

Hot Expansion

В

<API & L/C No.> API SPEC 5L NPS 26 STD 0.375 INCHWT GR B PSL1 SMLS 2015/03 NDE 1090PSI HEAT BSM-2272 (PIPE # LENGTH MASS) 102.6lb/ft ASTM/ASME A/SA106 GR B/C A/SA53 GR B NACE MR0175/MR0103 MADE IN CANADA

NPS 26 STD 0.375in. WT 2 DRL 102.6 <5	2 DRL 102.6	lb/ft μR/hr 2 DRL 102.6 <5	lb/ft μR/hr Gauss 2 DRL 102.6 <5 <20		2 DRL 102.6 <5 <20 Pass Pass Pass	2 DRL 102.6 <5 <20 Pass Pass Pass Pass	2 DRL 102.6 <5 <20 Pass Pass Pass
lb/ft . 102.6	lb/ft μR/hr . 102.6 <5	lb/ft μR/hr Gauss 102.6 <5 <20	lb/ft μR/hr Gauss Insp. 102.6 <5 <20 Pass	lb/ft μR/hr Gauss Insp. WT 102.6 <5 <20 Pass Pass Pass	lb/ft μR/hr Gauss Insp. WT 102.6 <5 <20 Pass Pass Pass	lb/ft μR/hr Gauss Insp. WT 102.6 <5 <20 Pass Pass Pass	lb/ft μR/hr Gauss Insp. WT ASTM E213 ASTM 1090
lb/ft . 102.6	lb/ft μR/hr . 102.6 <5	lb/ft μR/hr Gauss 102.6 <5 <20	lb/ft μR/hr Gauss Insp. 102.6 <5 <20 Pass	lb/ft μR/hr Gauss Insp. WT 102.6 <5 <20 Pass Pass Pass	lb/ft μR/hr Gauss Insp. WT 102.6 <5 <20 Pass Pass Pass	lb/ft μR/hr Gauss Insp. WT 102.6 <5 <20 Pass Pass Pass	lb/ft μR/hr Gauss Insp. WT ASTM E213 ASTM 1090
	μR/hr <5	μR/hr Gauss <5 <20	μR/hr Gauss Insp.	μR/hr Gauss Insp. WT	μR/hr Gauss Insp. WT	μR/hr Gauss Insp. WT	μR/hr Gauss Insp. WT ASTM E213 ASTM 1090 <5
μR/hr <5		Gauss <20	Gauss Insp. <20 Pass	Gauss Insp. WT	Gauss Insp. WT <20 Pass Pass Pass	Gauss Insp. WT <20 Pass Pass Pass	Gauss Insp. WT ASTM E213 ASTM 1090 <20
	Gauss <20		Insp. Pass	Pass Pass Pass	Pass Pass Pass	Pass Pass Pass	Pass Pass Pass Pass Pass Pass Pass

		BSM-2272	Heat	
	oceas, any ninea	= =	Steelmaking Method	
	Product	Heat	Test Type	
	0.21	0.19	C	
	0.99	0.96	Mn	
	0.009 0.005	0.010	P	
	0.005	0.008	S	Chemical
	0.21	0.23	Si	Chemical Analysis (wt%)
	0.08	0.09	Cr	wt%)
	0.04	0.04	Cu	
	0.01	0.00	Mo	
	0.02	20.0	N:	
	0.004	0.001	٧	
33	0.002	-	Ti	
	0.001	-	Nb	
	0.0007	ı	В	
2002	0.40	٠	CE(IIW)	
The same of the sa	0.40	τ	CE(CSA)	

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BSM-2272		Heat		BSM-2272		Heat		
Standard		Test		Heat		Test Type		
	rd			Ferrite & Pearlite		Microstructure		
	Sampl	lmpa		lite		re		
1	Impact Test Sample Details			78 HRBW		Hardness		
	°C	Temp		Pass		Flattening Test		
1	J	Impact Energy		_			Mechan	
1	J		Impact E		Longitudinal; 38.1 mm x	50	Ten	Mechanical Properties
1	J			al; 38.1 m	50mm GL	Tension Test	rties	
	AVG			m x WT				
1	%	% Shear				Yie		
1	%			45,200	psi	Yield (Rt0.5)		
1	%			73,		Tensil		
1	AVG			73,000	psi	Tensile (Rm)		
1	mm	Lateral Expansion		0.62	(Rt0.5/Rm)	Τ/Υ		
	mm		Lateral Expansion			?m)		
1	mm				41	%	Elongation (A)	
1	AVG					on (A)		

Additional Details:

✓ We hereby certify that this pipe product was manufactured, sampled, tested and inspected by Bri-Steel Manufacturing Inc. in accordance with API 5L-45th Ed., ASTM/ASME A106-2014/SA106-2013 Grade B/C A53-2012/SA53-2013, and the purchase order requirements, and that the results meet the corresponding requirements. Bri-Steel Manufacturing is registered and certified to ISO-9001:2008 and API Q1.

√ This pipe product meets the sour service requirements of NACE MR0175/ISO 15156-2:2009 Annex A2 for Region 3 Sour Service-2009 NACE MR0103-2012 Section 2.1

No weld repairs have been performed on this product.

 \checkmark 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:

Tonya Lam, C.E.T.

Assistant QA Manager