

Mill Test Certificate

Bri-Steel Manufacturing Inc. 2125-64 Avenue, Edmonton, AB Canada T6P 124

Tel: 001 (780) 469-6603

Fax: 001 (780) 469-6986 www.bri-steel.com

Seamless Carbon Steel Pipe

Production Method:

Hot Expansion Product Heat Treatment:

Product Heat Number:

BSM-1879 Product Size: 18T40

As-rolled

Production Date: Jun 09, 2014

Certificate No.: MTR- 001168

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

NERI-STEEL NPS 18 TRUE 40 0.562 INCHWT SMLS 2014/06 NDE

応証が正成明正明 HEAT BSM-1879 (PIPE # LENGTH MASS) 104.8lb/ft ASTM/ASME A/SA106 GR B/C A/SA53 GR B NACE MR0175/MR0103 MADE IN CANADA

BSM-1879		Heat	
Heat		Test Type	
NPS 18 TRUE 40 0.562in. WT		Product Size	Product: Details
2		Pieces	
DRL		Length	
104.8	lb/ft	Mass	
< 5	μR/hr	Geiger	
<10	Gauss	Res. Mag.	
Pass	insp.	Visual	
Pass		00	Z
Pass	WT	되	Non-Destructive Testing
Pass	ASTM E213	ч	tive Testing
Pass	ASTM	EI	
•		HydroTest	
Plain End	Condition	End	

		BSM-1879	Heat	
	Deges, rolly saled		Steelmaking Method	
	Product	Heat	Test Type	
	0.22	0.19	C	
	0.89	0.84	Z _n	
	0.021	0.018	P	
	0.009	0.008	S	Chemical
	0.25	0.23	Si	Chemical Analysis (wt%)
	0.07	0.07	Cr	wt%)
-	0.01	0.01	Си	
-	10.0		Mo	
	0.04	0.04	N:	
	0.003		٧	
	0.002		П	
-	100.0		МЬ	
	0.0003		В	
The state of the s	0.39		CE(IIW)	
Street, or other Designation of the last o	0.39	•	CE(CSA)	

-	BSM-1879		Heat Te	
	Heat		Test Type	
	Ferrite & Pearlite		Microstructure	
	78 HRBW		Hardness	
	Pass		Flattening Test	7
Section (Contraction)	Longitudinal: 38.1 mm x WT	50mm GL	Tension Test	Mechanical Properties
10,100	48.400	psi	Yield (Rt0.5)	
. 0000	73.500	psi	Tensile (Rm)	
0,00	0.66	(Rt0.5/Rm)	٧/٦	
i	42	%	Elongation (A)	

C. LOT.: AICC	9574 1070		Heat
	76	Standard	Test
	8	Sample Details	Impact Test
-		റ്	Temp
		Ĵ	
,		J	Impact
		J	Energy
		AVG	
		%	
	8	%	% Shear
4		%	ear
		AVG	
,		mm	
,		mm	Lateral E
,		mm	(pansion
,	8	AVG	

Additional Details:

✓ We hereby certify that this pipe product was manufactured, sampled, tested and inspected by Bri-Steel Manufacturing Inc. in accordance with ASTM/ASME A/SA106-2013 Grade B/C A/SA53-2012, and the purchase order requirements, and that the results meet the corresponding requirements.

Mill Test Certificate approved by:

√ 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.

 \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.

Tonya Lam, C.E.T.

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Assistant QA Manager



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NEAT BSM-1879 (PIPE # LENGTH MASS) 104.8Ib/ft ASTM/ASME A/SA106 GR B/C A/SA53 GR B NACE MR0175/MR0103 MADE IN CANADA

Heat	Test Type	Product: Details Product Size	Pieces	Length	Mass	Geiger	Res. Mag.	Visual	8 2	on-Destruc	Non-Destructive Testing UT UT UT	町	HydroTest
Heat	Test Type	Product Size	Pieces	Length	Mass lb/ft	Geiger µR/hr	Res. Mag.	Visual Insp.	SP D	¥ CI	ASTM E213 ASTM	ET ASTM	Hyd
BSM-1879	Heat	NPS 18 TRUE 40 0.562in. WT	2	DRL	104.8	Ġ	<10	Pass	Pass	Pass	Pass	Pass	

		BSM-1879	Heat	
	Ceges, rony nineo	Blast Furnace; EAF; Ladle Refining; Vacuum	Steelmaking Method	
	Product	Heat	Test Type	
	0.22	0.19	С	
	0.89	0.84	Mn	
	0.021	0.018	P	v)
	0.009	0.008	S	Chemical
	0.25	0.23	Si	Chemical Analysis (wt%)
-	0.07	0.07	Cr	wt%)
	0.01	0.01	Cu	
	0.01		Mo	
	0.04	0.04	Z:	
***************************************	0.003		٧	
	0.002		11	
	0.001		Мb	
-	0.0003		8	
	0.39	,	CE(IIW)	
	0.39	ı	CE(CSA)	

Microstructure Hardness Flattening Test Tension Test Yie Ferrite & Pearlite 78 HRBW Pass Longitudinal; 38.1 mm x WT								
Mechanical Properties Microstructure Hardness Flattening Test Tension Test 50mm GL	73,500	48,400	Longitudinal; 38.1 mm x WT	Pass	78 HRBW	Ferrite & Pearlite	Heat	BSM-1879
Mechanical Properties Microstructure Hardness Flattening Test Tension Test	psi	psi	50mm GL					
Mechanical Properties	5) Tensile (Rm	Yield (Rto	Tension Test	Flattening Test	Hardness	Microstructure	Test Type	Heat
			Mechanical Properties			The state of the s		

Heat	Test	Impact Test	Temp		Impact	Energy			% Shear	ear			Lateral Ex	(pansion	
	Standard	Sample Details	°C	ſ	ſ	ſ	AVG	%	%	%	AVG	mm	mm	mm	AVG
BSM-1879	-	£			,		•		-	t	r	ı			

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