

MAHARASHTRA SEAMLESS LIMITED
WORKS (MIL) TEST CERTIFICATE

EN 10204 : 3.1

Test Certificate No. MSL-140C02502022

Date 04-MAY-22

12.750 X 0.375

20 to 20.32

1335.45 (58 Pcs.)

CO X Wall Thick (Inch)

Length Range (FEET)

Total Length (FEET)

Material Code

Customer 42456 Dt. 04-MAR-22

P.O. No. 16210145

OC / Loading Slip No. ASTM A106 GR.B(2018) / API 5L GR.B / X42 FSL-1 2018

Specification Hot Finished Seamless Carbon Steel Pipes

Process/Type of Pipe

Sr. No.	Req.	Heat Test Unf. Analy.		Reference standard ASTM A-731 & ASTM E-415																		
		C	Mn	Si	P	S	Cl	Mo	Ni	Cu	V	Nb	Ti	Nb+V+Ti	B	Ca	Al	N	AUN	CHUNI	CE Pcm	CE (INW)
		Min	0.280	1.060	0.100	0.030	0.010	0.000	0.150	0.001	0.400	0.030	0.006	0.0016	0.0044	0.0003	0.0020	0.0065	4.00	0.0070		0.347
		Max	0.170	1.030	0.200	0.017	0.004	0.017	0.004	0.001	0.006	0.0010	0.0005	0.0028	0.0014	0.0002	0.0018	0.0027	0.0064	4.23	0.0080	0.349
1	AB657	H	0.170	1.030	0.200	0.017	0.004	0.017	0.004	0.001	0.006	0.0010	0.0005	0.0028	0.0014	0.0002	0.0018	0.0027	0.0064	4.23	0.0080	0.349
		P1	0.172	1.030	0.220	0.018	0.005	0.018	0.004	0.002	0.006	0.0010	0.0005	0.0028	0.0015	0.0002	0.0019	0.0028	0.0063	4.44	0.0080	0.352
		P2	0.174	1.035	0.230	0.018	0.004	0.018	0.005	0.002	0.006	0.0010	0.0005	0.0028	0.0015	0.0002	0.0014	0.0028	0.0062	4.52	0.0230	0.352
2	AB671	H	0.170	1.040	0.240	0.016	0.003	0.026	0.006	0.014	0.009	0.0010	0.0012	0.0020	0.0002	0.0015	0.0026	0.0060	4.33	0.0240	0.346	
		P1	0.165	1.035	0.235	0.015	0.002	0.028	0.006	0.016	0.008	0.0010	0.0010	0.0020	0.0002	0.0015	0.0026	0.0060	4.33	0.0240	0.346	
		P2	0.162	1.042	0.232	0.014	0.003	0.027	0.006	0.015	0.007	0.0020	0.0012	0.0015	0.0002	0.0013	0.0027	0.0061	4.43	0.0220	0.344	

Sr. No.	Heat No.	Test Unit	Quantity	Name of the Steel Maker and address / Supplier Heat No.	Reference standard ASTM A 370 & E-8				Reference standard ASTM A 370 & ASTM E-23				Reference standard ASTM E-92												
					Tensile Testing (Location: Pipe Body)		CVN Impact Test (Pipe Body)		Through Wall Hardness (Pipe Body)		Tensile Testing (Location: Pipe Body)		CVN Impact Test (Pipe Body)		Through Wall Hardness (Pipe Body)										
Sl. No.	Heat No.	Test Unit	Quantity	Name of the Steel Maker and address / Supplier Heat No.	YS (PS)	UTS (PS)	ELT (%)	YS (PS)	UTS (PS)	ELT (%)	Size & Orientation	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
1	AB657		4	JSP, Chhatigarh / 4124752	45434	71906	0.63	40																	
2	AB671		67	JSP, Chhatigarh / 4125997	52704	72921	0.72	42																	

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					Tensile Testing (Location: Pipe Body)		CVN Impact Test (Pipe Body)		Through Wall Hardness (Pipe Body)		Tensile Testing (Location: Pipe Body)		CVN Impact Test (Pipe Body)		Through Wall Hardness (Pipe Body)										
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Raw Material Fully Killed & Fine Grain practice Dimension Good
 Steel Route EAF-LRF-VD-CCM Weight Good
 Hot Rolling Temp. C 1880-2300 End Finish BEVEL Location & Orientation Good
 Heat Treatment SA Straightness Good Residual Magnesium 30 Gases Max 10% Notch & 3.2 mm radiati drilled hole
 Delivery Condition R Visual Good Field Weldability OK
 Norm./Temp. Temp. NA Bend Test NA Flattening Test OK
 HIC SSC Micro Structure/Grain Size OK
 Inclusion Rating OK Hot Straightm. Temp. C NA Colour Coding SA

(D) Marking/Stencilling: MAHA MSL ASTM A106 B / API 5L-GR.B / PSL-1 BE SRL 12.75 INCH 0.375 INCH LENGTH IN FEET HFS HEAT NO..... 2110 PSI + 4961 PPF MADE IN INDIA AND PO # 25.A36
 (E) Remarks : Material conforms to NACE MR -0175/ISO 15156-2 (2015) / MR0103-2015, Mill end Pour Country : INDIA
 Legends : T-Transverse, L-Longitudinal, YST- Yield strength, UTB-Ultimate Tensile strength, BU-Bulgeation, GU-Gauge Length, R-Roll, P1-Product 1, P2-Product 2, R- As Rolled, Q-Quenched & Tempered, N- Normalised, NRT-Normalised & tempered, NA -Not Applicable.
 The Material has been manufactured, sampled, tested and inspected and has been found conforming to the specification and PO. All the specifications refers in this certificate for all of latest edition.

FOR MAHARASHTRA SEAMLESS LIMITED
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 Warning: Modification or unauthorised use of this certification is strictly prohibited. Violation calls for criminal prosecution. For authenticity verification, you can contact at .msl@maharashtra.com
 Date: 01/01/2020