



**MAHARASHTRA SEAMLESS LIMITED**  
**WORKS (MILL) TEST CERTIFICATE**  
 EN 10204 : 3.1

QCF 20A

Customer :  
 P.O.No : 42456 Dtd. 04-03-2022  
 OC/Loading slip no. : 66210080 (Item No. 08)  
 Specification : ASTM A106 GR.B / API 5L GR.B / X42 PSL-1  
 Process/Type of Pipe : Hot Finished seamless carbon steel pipes

OD X WT : 60.30 mm X 3.91 mm ( 2.375" X 0.154" )  
 Length Range : 20 - 20 Feet  
 Total Length : 24440 Feet ( 1222 Pcs )  
 Material Code : .....

Test Certificate No: MSL-6/QC/0001G/2022  
 Date: 18 June 2022

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A) CHEMICAL COMPOSITION (%) - Reference standard ASTM A-751 & ASTM E-415																															
SI No	Heat No	Test Unit	Analy sis	C	Mn	Si	P	S	Cr	Mo	Ni	Cu	V	Nb	Ti	Nb+V	Nb+V+Ti	B	Ca	Al	N	Mn/C	Cu+Ni	CE Pcm	CE IIW	B) Special / supplementary Reqs.					
Req.	Min.	%		0.260	1.060	0.500	0.030	0.010	0.400	0.150	0.400	0.400	0.080	0.110	0.110			0.001													
	Max.	%		0.260	1.060	0.500	0.030	0.010	0.400	0.150	0.400	0.400	0.080	0.110	0.110			0.001													
1	AB691		H	0.170	1.040	0.230	0.020	0.005	0.011	0.0020	0.005	0.005	0.0020	0.0019	0.0017	0.0039	0.0056	0.0003		0.037			6.118	0.010		0.347					
			P1	0.180	1.030	0.220	0.019	0.005	0.012	0.0030	0.006	0.006	0.0018	0.0020	0.0017	0.0038	0.0055	0.0004		0.038			5.722	0.012		0.356					
			P2	0.160	1.050	0.230	0.020	0.004	0.011	0.0020	0.004	0.004	0.0021	0.0019	0.0018	0.0040	0.0058	0.0003		0.036			6.563	0.008		0.339					
C) MECHANICAL PROPERTIES																															
SI No.	Heat No.	Test Unit	Quantity		Name of the Steel Maker and Address/Supplier Heat No.	Reference standard ASTM 370 & E-8				Reference standard ASTM E-23				Reference standard ASTM E-18																	
			Pcs	Feet		Tensile Testing ( Loc: Pipe Body)				CVN Impact Test ( Pipe Body)				Through Wall Hardness (Pipe Body)																	
						Orientn.	YST (Mpa)	UTS (Mpa)	YST/ UTS Ratio	El (%)	Absorbed Energy (J)		% Shear Area		Hardness (HRB)																
						G.L.=50 mm Nom. Width= 19.05 mm				Temperature°C:				Transverse Direction																	
Req.	Min.	Max.																													
			1	2																							3	Avg	1	2	3
1	AB691		1222	24440	JSPL, Chhattisgarh/ 3215443	L	446.39	536.74	0.83	38.02													74	75	75	75	75				
							440.25	529.68	0.83	37.48																					
							443.26	533.64	0.83	37.65																					
Raw Material			Fully killed & Fine Grain Practice			Dimension			Good			NDE Method			Ultrasonic Testing - GOOD			End Area Inspection			OK										
Steel Route			EAF-LRF-VD-CCM			Weight			Good			Location & Orientation			Longitudinal & Transverse Notch at OD			Hydro Test Pressure			2970 Psi										
Hot Rolling Temp. °C			880-940			End Finish			Bevel			Type & Size of Ref Indicator			10% Notch X 50mm Length X 1.0mm Width			Holding Time			5 Sec.										
Heat Treatment			NA			Straightness			OK			Residual Magnetism			10 Gauss Max			End Protection			Plastic end cap										
Delivery Condition			R			Visual			OK			Field Weldability			NA			External Coating			Black Varnished										
Norm./Temp. Temp(°C)			NA			Bend Test			OK			Flattening Test			NA			Flaring Test			NA										
HIC			NA			SSC			NA			Micro Structure/Grain Size			Reveals fine Ferrite and pearlite /ASTM No. 7-8			CTOD			NA										
Inclusion Rating			NA			Hot Straight. Temp.°C			NA			Colour Coding			NA																
D) Marking/Stencilling : MAHA ((M) MSL API 5L X-42 PSL-1 / ASTM A106 GR.B / NACE MR0175/MR0103(% S HARDNESS CONTROLLED) BE SMLS SRL OD 2.375 INCH X WT 0.154 INCH HFS HEATNO... + 2970 PSI + LENGTH...IN FEET + MADE IN INDIA + WEIGHT - 3.66 LB/FT + PO/SHIPPING MARK : "PO # 25.436" + B.NO....																															
E) Remarks : 1) Matl Confirms to API 5L GR.B PSL-1 / X42 (EDN. 2018)/ASTM/ASME A 106 B (EDN. 2019a)/SA106 B (EDN. 2021). 2) "Country of melt and pour : INDIA". 3) REVISED TC Rev.01 Dtd. 21-09-2022.																															

Legends : T-Transverse, L-Longitudinal, YST-Yield Strength, UTS-Ultimate Tensile Strength, EL-Elongation, GL-Gauge Length, H-Heat, P1-Product 1, P2-Product 2, R-As Rolled, Q-Quenched & Tempered, N-Normalised, N&T-Normalised & Tempered, PE-Plain-end, BC-Buttress Thread Casing, LC-Long Round Thread Casing, SC-Short Round Thread Casing, NU-Non-upset tubing, EU-External Upset tubing, NA- Not Applicable

The material has been manufactured, sampled, tested and inspected and has been found conforming to the specification and PO

W & R.O : D-114, MIDC Industrial Area, Vile - Bhagad, Varchiwadi, Dist. Raigad, Maharashtra-402308 Phone : 9223685171

Warning : Modification or unauthorized use of this certification is strictly prohibited. Violation calls for criminal prosecution. For authenticity verification, you can contact us at : msitc@mahaseam.com.



FOR MAHARASHTRA SEAMLESS LTD  
 SOURABH KATIYAR - Engineer

Date: 31.01.2020