



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

QCF 20A

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

OD X WT : 42.20 mm X 4.85 mm ( 1.661" X 0.190" )  
 Length Range : 20 - 20 Feet  
 Total Length : 30020 Feet ( 1501 Pcs )  
 Material Code : -----

Test Certificate No. : MSL-6/QC/0001AA/2022  
 Date : 04 September 2022

A) CHEMICAL COMPOSITION (%) - Reference standard ASTM A-781 & ASTM E-418																		B) Special / Supplementary Reqs.								
S No	Heat No	Test Unit	Analysis	C	Mn	Si	P	S	Cr	Mo	Ni	Cu	V	Nb	Ti	Nb+V	Nb+V+Ti	B	Ca	Al	N	Mn/C	Co+Ni	CE Ppm	CE (TW)	
Req.	Min.	%		0.260	1.060	0.300	0.030	0.010	0.400	0.150	0.400	0.400	0.050	0.110	0.110		0.0021	0.0032	0.0002		0.029		6.118	0.011		0.345
	Max.	%		0.170	1.040	0.230	0.014	0.004	0.001	0.0040	0.007	0.004	0.0010	0.0012	0.0010	0.0022	0.0033	0.0002		0.030		5.722	0.011		0.354	
1	AB782		R	0.170	1.040	0.220	0.014	0.005	0.002	0.0030	0.006	0.005	0.0009	0.0013	0.0011	0.0022	0.0033	0.0002		0.028		6.118	0.011		0.345	
			P1	0.170	1.040	0.220	0.014	0.005	0.001	0.0030	0.006	0.005	0.0009	0.0013	0.0011	0.0022	0.0033	0.0002				6.118	0.011		0.345	
			P2	0.180	1.030	0.240	0.015	0.005	0.001	0.0030	0.006	0.005	0.0009	0.0013	0.0011	0.0022	0.0033	0.0002				5.722	0.011		0.354	

  

C) MECHANICAL PROPERTIES																	
S No	Heat No	Test Unit	Quantity	Name of the Steel	Tensile Testing (Long Pipe Body)				CWT Impact Test (Pipe Body)				Hardness (HRB)				
					YS (Mpa)	UTS (Mpa)	YS/UTS Ratio	EL (%)	Absorbed Energy (J)		% Shear Area		Transverse Direction				
					Size & Orientation:				Temperature (°C):								
					GL=50 mm Nom. Width = 19.05 mm				1 2 3 Avg 1 2 3 4 Avg 1 2 3 4 Avg								
Req.	Min.				290	415		30									
	Max.																
1	AB782		1501	30020	JSPL Chhattingarh/ 3218467	391.21	494.28	0.79	35.90					75 76 75 75 75			
						397.62	499.51	0.80	35.60								
						394.22	496.24	0.79	35.68								
						390.22	492.16	0.79	36.20								

  

Raw Material	Fully killed & Fine Grain Practice	Dimension	Good	NDE Method	Ultrasonic Testing - GOOD	End Area Inspection	OK
Steel Route	RAF-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	SQUARE CUT	Type & Size of Reindicator	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	Firing Test	NA
NIC	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/Stamping : MAHA (M) MSL API 5L GR.B / X42 PSL-1 / ASTM A106 GR.B / NACE MR0175 / MR0103 (S&S & HARDNESS CONTROLLED) PE SMLS SRL OD 1.661 INCH X WT 0.190 INCH HPS HEAT NO... + 2970 PSI + LENGTH... IN  
 FEET + WEIGHT + 3.00 LB/FT + MADE IN INDIA + PO/SHIPPING MARK - "PO# 28436" + ELNO...

E) Remarks : 1) Meet conforms to API 5L GR.B PSL-1 / X42 (EN. 2015) / ASTM/ASME A106 B (EN. 2019a) / SA106 B (EN. 2021). 2) "Country of melt and pour : INDIA".  
 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-Normalized, N&T-Normalized & Tempered, PE-Plain-end, BC-Buttress Thread Casts, LC-Long Round Thread Casts, SC-Short Round Thread Casts, NI-Non-onset tubing, EU-External Unset tubing, NA-Not Applicable



The material has been manufactured, sampled, tested and inspected and has been found conforming to the specification and PO  
 W & B.O : D-114/MDC Industrial Area, Vile - Bagan, Varchivadi, Dist. Raigad, Maharashtra - 402308 Phone : 9223485171  
 Warning : Modification or unauthorized use of this certificate is strictly prohibited. Violation calls for criminal prosecution. For authenticity verification, you can contact us at msll@mahaseam.com.  
 FOR MAHARASHTRA SEAMLESS LTD  
 DEBTANU PAL - Asst. Engineer