MAHARASHTRA SEAMLESS LIMITED

WORKS (MILL) TEST CERTIFICATE

EN 10204 : 3.1

QCF-20

Customer		OD X Wall Thick ((Inch))	10.750 X 0.365
P.O. No.	[illegible] Dt. 04-MAR-22	Length Range (FEET)	20 to 20.32
OC / Loading Slip No.	16210145	Total Length (FEET)	1051.7 (52 Pcs.)
Specification	ASTM A 106 GR.B(2019)/API 5LB/ X-42 PSL-1 2018	Material Code	
Process/Type of Pipe	Hot Finished Seamless Carbon Steel Pipes		

Test Certificate No.	MSL-14/QC/0083/2022
Date	12-APR-22

A) CHEMICAL COMPOSITION..(%) -: Reference standard ASTM A-751 & ASTM E-415 — B) Special/Suppl. Reqts.

Sr. 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	Al/N	Cu+Ni	CE Pcm	CE (IIW)
Req.	Min				0.290	0.100																			
	Max			0.280	1.060		0.030	0.010	0.400	0.150	0.400	0.400	0.080			.06	.15	.001							
1	AB546		H	0.180	1.040	0.250	0.018	0.004	0.016	0.003	0.008	0.007	0.0030	0.0005	0.0042	0.0035	0.0077	0.0002	0.0015	0.029	0.0064	4.53	0.0150		0.359
			P1	0.169	1.010	0.205	0.012	0.004	0.016	0.005	0.012	0.006	0.0010	0.0006	0.0019	0.0016	0.0035	0.0002	0.0014	0.030	0.0063	4.76	0.0180		0.343
			P2	0.169	1.010	0.204	0.011	0.003	0.016	0.004	0.013	0.005	0.0010	0.0007	0.0023	0.0017	0.0040	0.0001	0.0013	0.031	0.0062	5.00	0.0180		0.343

C) MECHANICAL PROPERTIES

Sl. No.	Heat No.	Test Unit	Quantity Pcs.	Quantity FEET	Name of the Steel Maker and address / Supplier Heat No.	Reference standard ASTM A 370 & E-8 Tensile Testing(Location:PipeBody) Orientn	YST (Psi)	UTS (Psi)	YST/UTS Ratio	EL(%)	Reference standard ASTM A370 & ASTM E-23 CVN Impact Test(Pipe Body) Absorbed Energy (J) / % Shear Area Size&Orientn.: mm Temperature:	Reference standard ASTM E-92 Through Wall Hardness (Pipe Body) Hardness (HV10) Transverse Direction
						G.L.=2" Nom.Width 1 1/2" -L					1 2 3 4 1 2 3 4	OD: 1 2 3 4 / Mid: 1 2 3 4 / ID: 1 2 3 4
Req.	Min.					.	42100	60200		30		- -
	Max.					.					- .	248 HV10
1	AB546		52	1051.7	JSPL, Chattisgarh / 4123248	L	53408	74198	0.72	39		140 141 142 143 / 143 142 142 143 / 140 141 142 143

Raw Material	Fully Killed & Fine Grain practice	Dimension	Good	NDE-Method	Electro Magnetic Inspn.-Good,Ref. Std. ASTM E-570	End Area Inspection	MPI-Good, Ref. Std. ASTM E-709
Steel Route	EAF-LRF-VD-CCM	Weight	Good	Location & Orientation	Longitudinal OD & ID	Hydro Test Pressure	2430 Psi
Hot Rolling Temp. C	880-930	End Finish	BEVEL	Type & Size of Ref.indicator	10% Notch & 3.2 mm radially drilled hole	Holding Time	10sec.
Heat Treatment	NA	Straightness	Good	Residual Magnetism	30 Gauss Max	End Protection	PLASTIC ID CAP
Delivery Condition	R	Visual	Good	Field Weldability	NA	External Coating	Varnished
Norm./Temp. Temp.	NA	Bend Test	NA	Flattening Test	OK	Flaring Test	NA
HIC	NA	SSC	NA	Micro Structure/Grain Size	OK	CTOD	NA
Inclusion Rating	OK	Hot Straight Temp. C	NA	Colour Coding	NA		

D) Marking/Stencilling: MAHA MSL ASTM A106 B / API 5L-B/X42 / PSL-1 BE SRL 10.75 INCH 0.365 INCH LENGTH IN FEET HFS HEAT NO..... 2430 PSI + 40.52 PPF MADE IN INDIA AND "PO # 25.436"

E) Remarks : Material confirms to NACE MR -0175/ISO 15156-2 (2015) /MR0103-2015 , Melt and Pour Country : INDIA

Legends : T-Transverse, L-Longitudinal, YST- Yield Strength, UTS-Ultimate Tensile Strength,EL-Elongation, GL-Gauge Length, H-Heat,P1-Product1,P2-Product2,R- As Rolled,Q-Quenched & Tempered,N- Normalised, N&T-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 referes in this certificate for all of latest edition.

FOR MAHARASTRA SEAMLESS LIMITED
Rajnesh Jain
Sr. Manager (QC)

MAHARASHTRA SEAMLESS LTD. PIPE NAGAR

W & R.O.: Pipenagar, Vill.Sukeli,N.H.17,B.K.G. Road,Dist. Raigarh, Maharastra-402126, phone:02194238511,222010,Fax:238513

Warning: Modification & unauthorised use of this certification is strictly prohibited. Violation calls for criminal prosecution. For authenticity verification, you can contact at :msltc@mahaseam.com