



RAW MATERIAL INCOMING INSPECTION REPORTS

D.C. No. :- F/05/01
Issue no. :- 01, 01.07.2018
Rev. no. :- 02, 11.05.23

Report No	1764	SECTION :-	60mm	HAET NO :-	5498	INVOICE NO.	15657																																																											
DATE :-	25/12/25	STEEL SUPPLIER :-	SLP	REC.QTY :-	4250	INVOICE DATE :-	22/12/25																																																											
GRADE :-	16 Mn Cr	STEEL TC NO :-	15657	NO. OF BARS :-	32																																																													
Process / Mfg Route	MRF - EAF - LF - VD - CCM - FMS - ADVC - RMS																																																																	
Chemistry	%C	%Mn	%Si	%S	%P	%Cr	%Ni	%Mo	%Al	%Cu	%As	%Sb	%V	%Nb	%Ti	%B																																																		
Min	0.13	1.20	0.150	0.015	0.008	0.800			0.030																																																									
Max	0.18	1.300	0.400	0.030	0.030	1.100	0.300	0.100	0.050	0.300																																																								
Mill Tc Value	0.153	1.23	0.279	0.029	0.011	1.046	0.018	0.009	0.031	0.030	0.0010	0.0001	0.006	0.0010	0.0007	0.0006																																																		
Spectro Value	0.173	1.245	0.288	0.029	0.017	1.036	0.017	0.002	0.031	0.030	0.0010	0.0001	0.006	0.0010	0.0007	0.0006																																																		
Bar Size (As per WI...)	Qty : 10 % Of Total Heat							Diameter/Section Size (In mm)																																																										
No of Bar Checked	S.NO.	1	2	3	4	5	6	7	8	9	10	11	12																																																					
		60.2	60.1	60.4	60.1	60.2	60.0	60.3	60.5	60.2	60.4	60.1	60.3																																																					
Gas Content (PPM): As per Mill Tc	N2		H2		O2																																																													
	Min		60		20																																																													
	Max		120		2.5																																																													
	Value		7.51		1.1																																																													
	Mill Tc		7.51		1.1																																																													
Steel Supply Condition:																																																																		
MACRO	(i)	Internal soundness Sample : (ASTM E381 or as per customer)																																																																
	(ii)	Dendrite structure 01 sample : Value Obs. S3 R3 C2 MAX																																																																
	(iii)	Step Down Test Sample : (IS4075 or as per customer) S2 R2 C2																																																																
		OK																																																																
Micro structure As Rolled :	Micro structure : (or as per customer)																																																																	
	Mill Tc F4P																																																																	
	SSB F4P																																																																	
ULTRASONIC TEST (AS PER ASTM A388) :	Mill Tc 100% Pass OK																																																																	
INCLUSION RATING (IS 14163 / ASTM: E45A OR REQUIRED BY CUSTOMER)																																																																		
	A		B		C		D		DS																																																									
	Sulphide		Aluminate		Silicate		Oxide																																																											
	TN	TK	TN	TK	TN	TK	TN	TK	TN	TK	TN	TK	TN	TK	TN	TK																																																		
Cust Spec. If Any	2.0	1.5	2.0	1.0	0.5	0.5	1.0	1.0																																																										
Mill Tc	1.0	0.5	0.5	0	0	0	0.5	0.5																																																										
SSB	1.0	0.5	0.5	0	0	0	0.5	0.5																																																										
GRAIN SIZE : (ASTME112 / IS-4748)	Spec.:- S-8 Mill Tc 7.5 SSB 7																																																																	
JOMINY HARDENBILITY IS-3848 / ASTM A255 (As per required by Customer)	Distance Specified	1.5	5	10	15	20	25	30																																																										
	Mill Tc	39.44	35.39	29.35	25.31	22.5	20.4	18.2																																																										
	Observed	40	36	29	28	25	22	22																																																										
MECHANICAL PROPERTIES : (If Required in TDC / Customer)																																																																		
	As per IS:1608 / ASTM A 370				As per IS: 1757																																																													
	U.T.S		Y.S		N/mm2		%EL		IMPACT VALUE		IMPACT VALUE																																																							
	N/mm2 / MPA		/MPA						CHARRY		IZOD																																																							
	Specified		1030-1320		705 min		8 min		55 J min																																																									
	Observed		1125-1225		1049-1175		22.40%		48 J																																																									
As Rolled Hardness (BHN (Max / Min) (If Required in TDC / Customer)	1	2	3	4	5																																																													
	160	162	164	166	167																																																													
VISUAL :																																																																		
(i)	Surface Condition	100 % Bars Checked OK																																																																
(ii)	Heat No.	100 % Bars Checked OK																																																																
(iii)	Color Code.	100 % Bars Checked OK																																																																
REDUCTION RATIO : Specify BLOOM SIZE - 200x200 REDUCTION RATIO : 14:15:1 (If Required in TDC / Customer) As Per Mill TC																																																																		
DECARB LEVEL : (AS PER IS 6396 / ASTM E1077)	Specified	0.60 mm max																																																																
(If Required in TDC / Customer)	Observed	PD	0.21																																																															
UPSET/BILITY TEST (AS PER IS 10167) :	OK																																																																	
Test Certificate verified for Each Heat no :	Available & OK		Not Available		Not Conforming																																																													
TDC / Customer STD (If Required in TDC / Customer)	SSB/TDC	Mill Tc No.		Mill Tc Date		Verified By																																																												
	RF-1001 R3	25021263		22/12/25																																																														
MIX-UP TEST (If Required in TDC / Customer)	Verified By Mobile Spectro / X-Ray Gun / Spark Test																																																																	
	Accepted	1																																																																
Other Remarks																																																																		
Checked By																																																																		
Approved By																																																																		

