



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	1758	SECTION :-	8mm	HAET NO :-	2990	INVOICE NO :-	5296																																			
DATE	20/12/25	STEEL SUPPLIER :-	Hot Rolled	RECQTY :-	32110 kg	INVOICE DATE :-	21/12/25																																			
GRADE	SAE 8620H	STEEL TC NO :-	5488	NO. OF BARS :-																																						
Process / Mfg Route	EAF + LF + VD + CM + Fmc																																									
Chemistry	%C	%Mn	%Si	%S	%P	%Cr	%Ni	%Mo	%Al	%Cu	%As	%Sb	%V	%Nb	%Ti	%B																										
Min	0.18	0.70	0.15	0.030	0.005	0.40	0.40	0.15	0.020	0.020	0.005	0.005	0.005	0.005	0.005	0.005																										
Max	0.22	0.90	0.35	0.035	0.035	0.60	0.70	0.20	0.050	0.300	0.005	0.005	0.005	0.005	0.005	0.005																										
Mill Tc Value	0.210	0.855	0.190	0.030	0.015	0.565	0.473	0.222	0.023	0.195	0.0048	0.0047	0.0047	0.0047	0.0047	0.0047																										
Spectro Value	0.225	0.982	0.213	0.035	0.014	0.554	0.483	0.230	0.026	0.193	0.004	0.004	0.004	0.004	0.004	0.004																										
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																													
		80.2	80.1	80.1	80.4	80.3	80.1	80.2	80.5	80.1	80.2	80.4	80.1																													
Gas Content (PPM): As per Mill Tc			N2	H2	O2																																					
			Min																																							
			Max																																							
			Value																																							
			Mill Tc	85	0.436	14																																				
Steel Supply Condition:	Hot Rolled																																									
MACRO	(i)	Internal soundness Sample : (ASTM E381 or as per customer)																																								
	(ii)	Dendrite structure 01 sample : Value Obs. S 52 R 2 C 0																																								
	(iii)	Step Down Test Sample : (IS4075 or as per customer) OK																																								
Micro structure As Rolled :	Micro structure : (or as per customer)																																									
			Mill Tc	PTF+B																																						
			SSB	PTF+B																																						
ULTRASONIC TEST (AS PER ASTM A388) :	Mill Tc																																									
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																														
			Cust Spec. If Any	2.0	1.5	2.0	1.0	0.5	0.5	1.0	1.0																															
			Mill Tc	1.5	0.5	0.5	0.0	0.0	0.0	1.0	0.0																															
			SSB	1.5	0.5	0.5	0.0	0.0	0.0	1.0	0.0																															
GRAIN SIZE : (ASTM E112 / IS-4748)	Spec:-		6-8		Mill Tc		7		SSB		6.5																															
JOMINY HARDENBILITY IS-3848 /ASTMA255 (As per required by Customer)	Distance		4/16																																							
	Specified		34-39																																							
	Mill Tc		38																																							
	Observed		39																																							
MECHANICAL PROPERTIES : (If Required in TDC /Customer)	As per IS:1608/ ASTM A 370																																									
			U.T.S		Y.S		N/mm2		%EL		IMPACT VALUE		IMPACT VALUE																													
			N/mm2 /MPA		/MPA						CHARRY		IZOD																													
	Specified		1180-1570		930 min		7 min		22.75J		27.5 J min																															
	Observed		1170-1077		1057-614																																					
As Rolled Hardness (BHN (Max / Min) (If Required in TDC /Customer)			1	2	3	4	5																																			
			175	176	178	180	181																																			
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 : 8.0:1 (If Required in TDC /Customer) As Per Mill Tc																																										
DECARB LEVEL : (AS PER IS 6396 /ASTM E1077)	Specified																																									
(If Required in TDC /Customer)	Observed		PD	0.11		FD																																				
UPSETIBILITY 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. 5488		Mill Tc Date 20/12/25		Verified By :																																			
			FAL-MTS-02-04, Rev. 06																																							
MIX-UP TEST (If Required in TDC /Customer)	Verified By Mobile Spectro /X-Ray Gun/Spark Test																																									
			Accepted	✓		Rejected																																				
Other Remarks																																										
Checked By :	Approved By :																																									

