RAW MATERIAL INCOMING INSPECTION REPORTS

1775	**SECTION :-** 120mm	**HAET NO :-** 8358	
24/3/25	**STEEL SUPPLIER :-** Aarti Steel	**REC.QTY :-** 31490 kg	**INVOICE NO.-** 5881
SAE1053H	**STEEL TC NO :-** 5941	**NO. OF BARS :-** 60	**INVOICE DATE.-** 21/3/25

Process /Mfg Route EAF + LF + VD + CCM + EMS

	%C	%Mn	%Si	%S	%P	%Cr	%Ni	%Mo	%Al	%Cu	%As	%Sb	%V	%Pb	%Ca	%Nb	%Ti	%B
	0.480	0.600	0.150	0.015	—	—	—	—	0.020									
	0.550	0.900	0.40	0.035	0.035	0.250	0.250	0.060	0.050	0.250	—	—	—	—	0.0010	—	—	0.0005
value	0.490	0.850	0.205	0.02	0.022	0.190	0.055	0.015	0.022	0.128	—	—	0.0015	—	0.0005	—	0.010	0.0005
value	0.480	0.853	0.205	0.02	0.018	0.189	0.052	0.015	0.024	0.112	—	—	0.002	—	0.0005	—	<0.002 0.012	0.0004

Bar Size (As per WI...)   Qty :10 % Of Total Heat

Bar Checked

S.NO.	1	2	3	4	5	6	7	8	9	10	11	12
Diameter/Section Size(in mm)	120.3	120.2	120.5	120.1	120.5	120.7	120.3	120.7	120.2	120.6	120.2	120.4

Gas Content (PPM): As per Mill Tc

	N2	H2	O2
Min	60		
Max	120	2.5	20
Value Mill Tc	79	0.848	12

Steel Supply Condition: HOT Rolled

MACRO
(i) Internal soundness Sample : (ASTM E381 or as per customer)   S3   R2   C2 MAX
    Value Obs.   S2   R0   C2
(ii) Dendrite structure 01 sample :
(iii) Step Down Test Sample :(IS4075 or as per customer)   OK

Micro structure As Rolled :

Micro strcuture : (or as per customer)
Mill Tc   P+F
SSB   P+F

ULTRASONIC TEST (AS PER ASTM A388) :   Mill Tc   100% Done ok. 1/16 Flat Bottom hole

INCLUSION RATING (IS 14163 /ASTM: E45A OR REQUITRED BY CUSTOMER)

	A Sulphide		B Aluminate		C Silicate		D Oxide		DS	
	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 : (ASTME112 / IS-4748)   Spec.:- 5-8   Mill Tc 6-5   SSB 7

JOMINY HARDENBILTY
IS-3848 /ASTMA255
(As per required by Customer)

Distance	1.5	3	5	7	9	11	13	15	20	25	30
Spcificified	59-63	50-61	45-58	32-50	28-42	26-36	25-33	24-31	22-30	20MIN	19MIN
Mill Tc	59.5	57.5	51.5	37	31.5	30.5	29.5	28.5	27	25.5	24.5
Observed	59	56	50	35	31	30	30	29	26	25	24

MECHANICAL PROPERTIES : (If Required In TDC /Customer)

	U.T.S N/mm2 /MPA	Y.S N/mm2 /MPA	%EL	IMPACT VALUE CHARRY	IMPACT VALUE IZOD
	As per IS:1608/ ASTM A 370			As per IS: 1757	
Specified	930-1130	700 MIN	8 MIN	30J MIN	
Observed	992	798	9	35J	

As Rolled Hardness (BHN (Max / Min)) (If Required in TDC /Customer)

1	2	3	4	5
190	192	195	196	198

VISUAL :
(i) Surface Condition   100 % Bars Checked   OK
(ii) Heat No.   100 % Bars Checked   OK
(ii) Color Code.   100 % Bars Checked   OK

REDUCTION RATIO : Specifiy 7:1 Min   BLOOM SIZE 240x240   REDUCTION RATIO : 5.1:1
(If Required in TDC /Customer) As Per Mill TC

DECARB LEVEL : (AS PER IS 6396 / ASTM E1077)   Specified 0.6mm Max
(If Required in TDC /Customer)   Observed PD 0.21   FD

UPSETIBILITY TEST (AS PER IS 10167) :   OK

Test Certificate verified for Each Heat no :

	Available & Ok	Not Available	Not Conforming
	OK		

TDC / Customer STD (If Required in TDC /Customer)   SSB/TDC/ QF-1001 R3   Mill Tc No. 5941   Mill Tc Date 21/3/25   Verified By

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**