



RAW MATERIAL INCOMING INSPECTION REPORTS

D.C. No.: F/05/01
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SECTION :-	80mm	HAET NO. :-	54448	INVOICE NO. :-	13750												
STEEL SUPPLIER :-	SLR	REC. QTY. :-	13750	INVOICE DATE :-	4/3/25												
STEEL TC NO. :-	25030139	NO. OF BARS :-	60														
Process / Mfg Route	MRF-EPF-LRF-VD-CCM-ENG-ARMIC-RMS																
%C	%Mn	%Si	%S	%P	%Cr	%Ni	%Mo	%Al	%Cu	%As	%Sb	%V	%Pb	%Ca	%Nb	%Ti	%B
0.13	1.00	0.150	0.015	0.020	0.80	0.050	0.000	0.020	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.18	1.300	0.400	0.030	0.020	1.10	0.300	0.100	0.050	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.168	1.210	0.220	0.021	0.013	1.006	0.016	0.006	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.176	1.200	0.21	0.020	0.016	1.003	0.013	0.002	0.027	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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

S.NO.	1	2	3	4	5	6	7	8	9	10	11	12
Diameter/Section Size (in mm)	80.4	80.1	80.1	80.3	80.0	80.5	80.2	80.1	80.1	80.3	80.5	80.3

Gas Content (PPM): As per Mill Tc

	N2	H2	O2
Min	60		
Max	120	2.5	20
Value	90.2	1.43	12.4
Mill Tc			

Steel Supply Condition:

Hot Rolled

MACRO

- (I) Internal soundness Sample: (ASTM E381 or as per customer) Value Obs. S3 R3 C2 MPA
- (II) Dendrite structure O1 sample: >S2 >R2 >C2
- (III) Step Down Test Sample: (IS4075 or as per customer) OK

Micro structure As Rolled:

Micro structure: (or as per customer)

Mill Tc

SSB

F+P

ULTRASONIC TEST (AS PER ASTM A388):

Mill Tc

100% Done 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
Cust Spec. If Any	2.0	1.5	2.0	1.0	0.5	0.5	1.0	1.0		
Mill Tc	1.0	0.0	0.5	0.0	0.0	0.0	1.0	0.0		
SSB	1.0	0.0	0.5	0.0	0.0	0.0	1.0	0.0		

GRAIN SIZE:

(ASTME112 / IS-4748)

Spec: 5-8 Mill Tc 8 SSB 7

JOMINY HARDENBILITY

IS-3848 / ASTM A255

(As per required by Customer)

Distance	1.5	5	10	15	20	25	30										
Specified	39-44	35-39	29-35	25-31	22-28	21-27	20-26										
Mill Tc	42.7	37.7	30.6	26.1	24.1	22.2	20.7										
Observed	42	40	30	27	24	21	21										

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	1030-1370	735 Min		8 Min	25 J Min	
Observed	1159	1042		15.3	25.5	

As Rolled Hardness

(BHN (Max / Min)

(If Required in TDC / Customer)

1	2	3	4	5
160	164	162	166	168

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 7:1 Min

BLOOM SIZE:

200x200

REDUCTION RATIO:

7.96:1

(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

0.2

FD

UPSETABILITY TEST (AS PER IS 10167):

OK

Certificate verified for Each Heat no:

Available & OK

Not Available

Not Conforming

Customer STD

(If Required in TDC / Customer)

SSB/TDC/

Mill Tc No.

Mill Tc Date

Verified By:

PF-1001R3

25030139

4/3/25

TEST

(If Required in TDC / Customer)

Verified By Mobile Spectro / X-Ray Gun / Spark Test

Accepted

Rejected

Other Remarks

By: [Signature]

Approved By: [Signature]

