

RAW MATERIAL INCOMING INSPECTION REPORTS

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

1779
19325
40102

SECTION :- 5644
STEEL SUPPLIER :- ARORA
STEEL TC NO :- 0039774

HAET NO :- A74210
REC.QTY :- 20800 K2
NO. OF BARS :- 192

INVOICE NO. :- A72425/002/579
INVOICE DATE :- 18-03-2025

Process / Mfg Route
EMF - RF - KD - CCM - AMLC - EMS - RM

%C	%Mn	%Si	%S	%P	%Cr	%Ni	%Mo	%Al	%Cu	%As	%Sb	%V	%Nb	%Ti	%B
0.570	0.500	0.150	0.020	-	0.280	-	-	0.020	-	-	-	-	-	-	-
0.440	0.500	0.400	0.040	0.035	0.320	0.120	0.060	0.050	-	-	-	-	-	-	-
0.475	0.740	0.250	0.026	0.017	0.280	0.120	0.040	0.025	0.125	-	-	-	-	-	-
0.440	0.763	0.255	0.030	0.018	0.274	0.119	0.041	0.025	0.112	-	-	0.002	-	-	0.0005

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

S.NO.	1	2	3	4	5	6	7	8	9	10	11	12
Diameter/Section Size (in mm)	56.2	56.1	56.4	56.7	56.5	56.8	56.5	56.9	56.3	56.2		

Gas Content (PPM): As per Mill Tc

	N2	H2	O2
Min	60	-	-
Max	120	2.5	20
Value	77.0	0.79	11.00

Steel Supply Condition: AS HOT ROLLED

MACRO

(i) Internal soundness Sample : (ASTM E381 or as per customer) Value Obs. 53 R3 C2

(ii) Dendrite structure O1 sample : >S1 >R1 >C2

(iii) Step Down Test Sample : (IS4075 or as per customer) OK

Micro structure As Rolled :

Micro structure : (or as per customer) Banding OK as per UNI 8449 max of STR4 is acceptable

Mill Tc P4F

ULTRASONIC TEST (AS PER ASTM A388) : Mill Tc 100% DONE OK

INCLUSION RATING (IS 14163 / ASTM E45A OR REQUIRED 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 : Spec:- 5-8 Mill Tc 6.0 to 7.0 SSB 6

JOMINY HARDENILITY IS-3848 / ASTM A255 (As per required by Customer)

Distance Specified	1	2	3	4	5
Mill Tc					
Observed					

MECHANICAL PROPERTIES : (If Required In TDC / Customer)

	As per IS:1608 / ASTM A 370			As per IS: 1757	
	U.T.S N/mm2 / MPA	Y.S N/mm2 / MPA	%EL	IMPACT VALUE CHERRY	IMPACT VALUE IZOD
Specified	700-840	490	15	25J	-
Observed	773	540	16.8	38J	-

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

	1	2	3	4	5
190	195	198	200	209	

VISUAL :

(i) Surface Condition 100 % Bars Checked OK

(ii) Heat No. 100 % Bars Checked OK

(ii) Color Code. 100 % Bars Checked OK

REDUCTION RATIO : Specify 7.1 min BLOOM SIZE - 200X200 REDUCTION RATIO : 16:25:1

(If Required in TDC / Customer) As Per Mill Tc

DECARB LEVEL : (AS PER IS 6396 / ASTM E1077)

	Specified	Observed	PD	FD
0.6 mm		0.21 mm		

(If Required in TDC / Customer)

UPSETABILITY TEST (AS PER IS 10167) : OK

Test Certificate verified for Each Heat no :

	Available & Ok	Not Available	Not Conforming
1			

TDC / Customer STD (If Required in TDC / Customer) SSB/TDC/ Mill Tc No 0039774 Mill Tc Date 18-03-2025 Verified By: S4

Q.F. 1001-R3. J4td 14-06-2024

Mix UP TEST (If Required in TDC / Customer) Verified By Mobile Spectro / X-Ray Gun / Spark Test

Accepted	Rejected
1	

Other Remarks

Checked By S4 Approved By