

768	SECTION :-	7mm	HAET NO. :-	54445	INVOICE NO. :-	16358									
768	STEEL SUPPLIER :-	SLR	REC.QTY. :-	5280	INVOICE DATE :-	31/05									
25030094	STEEL TC NO. :-	25030094	NO. OF BARS :-	30											
Process/Mfg Route: (M)BF-EOF-LRF-UD-CCMC-FMS-AMLC-RMS															
%C	%Mn	%Si	%S	%P	%Cr	%Ni	%Mo	%Al	%Cu	%As	%Sb	%V	%Nb	%Ti	%B
0.150	1.000	0.50	0.015	1.00	1.000	0.300	0.100	0.020	0.050	0.002	0.001	0.001	0.001	0.001	0.001
0.200	1.300	0.400	0.020	0.020	1.000	0.300	0.100	0.020	0.050	0.002	0.001	0.001	0.001	0.001	0.001
0.180	1.200	0.200	0.015	1.00	1.000	0.300	0.100	0.020	0.050	0.002	0.001	0.001	0.001	0.001	0.001
0.180	1.200	0.200	0.015	1.00	1.000	0.300	0.100	0.020	0.050	0.002	0.001	0.001	0.001	0.001	0.001

Bar Size (As per WI...)

Qty: 10 % Of Total Heat

S.NO.	1	2	3	4	5	6	7	8	9	10	11	12
	76.0	76.4	76.1	76.1	76.0	76.4	76.2	76.0	76.3	76.5	76.1	76.3

Gas Content (PPM): As per Mill Tc

	N2	H2	O2
Min	60		
Max	120	25	20
Value			
Mill Tc	87.2	121	15.1

Steel Supply Condition:

Hot Rolled

MACRO	(i)	Internal soundness Sample : (ASTM E381 or as per customer)	S3 R3 C2 MAX
	(ii)	Dendrite structure 01 sample :	752 7R2 7C2
	(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
R+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	
	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	0.0	0.5	0.0		
SSB	1.0	0.5	0.5	0.0	0.0	0.0	0.5	0.0		

GRAIN SIZE :

(ASTM E112 / IS-4748)

Spec:- 5-8 Mill Tc 7 SSB 7

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

Distance	1.5	5	10	15	20	25	30				
Specified	41-46	38-44	32-38.5	29-35.5	27-32.5	25-32	24-31				
Mill Tc	43.3	41.6	39.7	37.9	36.3	35.2	35				
Observed	43	41	40	38	36	35	35				

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	1800-1570	930 min		7 min	25 J min	
Observed	1348-382	1317.094		25.16%	30.7	

As Rolled Hardness

(BHN (Max / Min)

(If Required in TDC /Customer)

1	2	3	4	5
162	165	160	164	166

QUAL :

(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 mm

BLOOM SIZE :-

200x200

REDUCTION RATIO :

10.39:1

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

SCAB LEVEL :

(AS PER IS 6396 /ASTM E1077)

Specified

0.60 mm max

Observed

PD

0.18

FD

UPSETABILITY TEST (AS PER IS 10167) :

OK

Certificate verified for Each Heat no :

Available & Ok

Not Available

Not Conforming

Customer STD

(As per TDC /Customer)

SSB/TDC/

Mill Tc No

Mill Tc Date

Verified By :

2F 1001 R3

25030094

31/05

TEST

(As per TDC /Customer)

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

Accepted

Rejected

Other Remarks

Approved By