

RAW MATERIAL INCOMING INSPECTION REPORTS

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1727	SECTION:-	70mm	HAET NO.:-	K196244	INVOICE NO.:-	9043634606
28/10/24	STEEL SUPPLIER:-	K196244	REC.QTY:-	34780	INVOICE DATE:-	23/10/2024
4032104	STEEL TC NO.:-	K196244	NO. OF BARS:-			

Process/Mfg Route															
%C	%Mn	%Si	%S	%P	%Cr	%Ni	%Mo	%Al	%Cu	%As	%Sb	%V	%Nb	%Ti	%B
0.38	0.6	0.15	0.02	-	0.9	-	0.15	0.02	-	-	-	-	-	-	-
0.45	0.9	0.4	0.04	0.035	1.2	0.3	0.25	0.05	0.3	-	-	-	-	-	-
0.43	0.87	0.18	0.025	0.015	1.152	0.022	0.184	0.026	0.072	-	-	-	10.0	-	5.0
0.436	1.882	0.104	0.03	0.02	1.1	0.023	0.168	0.026	0.082	-	-	0.003	-	0.001	0.004

Bar Size	(As per WI...)	Qty: 10 % Of Total Heat										
d: 10	Diameter/Section Size (in mm)											
S.NO.	1	2	3	4	5	6	7	8	9	10	11	12
70	70.1	70.2	70.3	70.2	70.1	70.2	70.3	70.1	70.4	70.1		

Gas Content (PPM): As per Mill Tc			
	N2	H2	O2
Min	60	-	-
Max	120	2.0	15
Value	81	1.53	10
Mill Tc			

Steel Supply Condition:	AS ROLLED
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MACRO	(i)	Internal soundness Sample: (ASTM E381 or as per customer)	S3	R3	C2
	(ii)	Dendrite structure 01 sample:	L53	CR3	C22
	(iii)	Step Down Test Sample: (IS4075 or as per customer)	OK		

Micro structure As Rolled:	Micro structure: (or as per customer)
Mill Tc	OK
SSB	OK

ULTRASONIC TEST (AS PER ASTM A388):	Mill Tc	100% OK
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INCLUSION RATING (IS 14163 /ASTM: E45A OR REQUIRED BY CUSTOMER)									
	A		B		C		D		DS
	Sulphide	Aluminate	Silicate	Oxide	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	0.5	
SSB	1.5	0.5	0.5	0.0	0.0	0.0	1.0	0.5	

GRAIN SIZE:	Spec:-	5-8	Mill Tc	7.0	SSB	6.5
(ASTME112 / IS-4748)						

JOMINY HARDENILITY	Distance	51.5	53	55	57	59	61	63	65	67	69	71	73	75	77
IS-3848 /ASTMA255	Specified	55.5-61	55.5-61	55.5-61	54-60	53.5-56	51.5-54	49.5-51	48-50	44-56	41-53	39.5-50			
(As per required by Customer)	Mill Tc	60	59.5	58.5	57	56.5	55.5	54.5	52.5	49	46.5	44.5			
	Observed	59	58	57	57	55	53	52	50	46	44	42			

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	1030-1230	835mm	10 mm	25 mm	
	Observed	1065	874	15.8	945	
As Rolled Hardness						
(BHN (Max / Min)						
(If Required in TDC/Customer)						

VISUAL:	(i)	Surface Condition	100 % Bars Checked	OK	NO (Gas cutting, rust, cracks)
	(ii)	Heat No.	100 % Bars Checked	OK	(K196244)
	(ii)	Color Code.	100 % Bars Checked	OK	(Full yellow)

REDUCTION RATIO:	Specify	BLOOM SIZE -	200X200	REDUCTION RATIO:	1:10:3.9
(If Required in TDC/Customer)	As Per Mill TC				

DECARB LEVEL:	(AS PER IS 6396 / ASTM E1077)	Specified	0.6 mm
(If Required in TDC/Customer)		Observed	PD
			0.38
			FD

UPSETABILITY TEST (AS PER IS 10167):	
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Test Certificate verified for Each Heat no:	Available & OK	Not Available	Not Conforming
	OK		

TDC / Customer STD	SSB/TDC/	Mill Tc No.	Mill Tc Date	Verified By:
(If Required in TDC /Customer)				

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

Accepted	✓	Rejected	
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Other Remarks	
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Checked By	Approved By

