

RAW MATERIAL INCOMING INSPECTION REPORTS

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

1784	SECTION :-	80mm	HAET NO. :-	K20225	INVOICE NO. :-	9043036946																																																																																
51015	STEEL SUPPLIER :-	Kalyani Steel	REC. QTY. :-	23940kg	INVOICE DATE :-	21/1/25																																																																																
100mm	STEEL TC NO. :-	K202255	NO. OF BARS :-	135																																																																																		
Process / Mfg Route: EOT - (RF - N1) - CCM CEMS (AMLC) - R Mill																																																																																						
<table border="1"><thead><tr><th>%C</th><th>%Mn</th><th>%Si</th><th>%S</th><th>%P</th><th>%Cr</th><th>%Ni</th><th>%Mo</th><th>%Al</th><th>%Cu</th><th>%As</th><th>%Sb</th><th>%V</th><th>%Nb</th><th>%Ti</th><th>%B</th></tr></thead><tbody><tr><td>0.350</td><td>0.600</td><td>0.150</td><td>0.000</td><td>0.000</td><td>0.900</td><td>0.150</td><td>0.000</td><td>0.000</td><td>0.300</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>0.450</td><td>0.900</td><td>0.400</td><td>0.000</td><td>0.000</td><td>1.200</td><td>0.300</td><td>0.450</td><td>0.000</td><td>0.300</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>0.424</td><td>0.821</td><td>0.191</td><td>0.000</td><td>0.000</td><td>1.010</td><td>0.000</td><td>0.157</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>0.440</td><td>0.890</td><td>0.187</td><td>0.000</td><td>0.000</td><td>1.193</td><td>0.000</td><td>0.166</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td></tr></tbody></table>							%C	%Mn	%Si	%S	%P	%Cr	%Ni	%Mo	%Al	%Cu	%As	%Sb	%V	%Nb	%Ti	%B	0.350	0.600	0.150	0.000	0.000	0.900	0.150	0.000	0.000	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.450	0.900	0.400	0.000	0.000	1.200	0.300	0.450	0.000	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.424	0.821	0.191	0.000	0.000	1.010	0.000	0.157	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.440	0.890	0.187	0.000	0.000	1.193	0.000	0.166	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
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Bar Size (As per WI.:-)	Qty: 10 % Of Total Heat											
Diameter/Section Size (In mm)												
S.NO.	1	2	3	4	5	6	7	8	9	10	11	12
	80.3	80.0	80.3	80.4	80.1	80.2	80.5	80.2	80.0	80.2	80.3	80.1

Gas Content (PPM): As per Mill Tc	H2	H2	O2
Min	60		
Max	120	2	15
Value	82	1.61	10
Mill Tc			

Steel Supply Condition:	Hot Rolled
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MACRO	(i)	Internal soundness Sample: (ASTM E381 or as per customer)	S3	R3	C2	MAX
	(ii)	Dendrite structure 01 sample:	S3	R3	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	P+P+P

ULTRASONIC TEST (AS PER ASTM A388):	Mill Tc	100% Done OK
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INCLUSION RATING (IS 14163 / ASTM E454 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	1.5	0.5	0.0	0.0	0.0	0.0	1.0	0.5		
SSB										

GRAIN SIZE:	Spec.:-	5-8	Mill Tc	7	SSB	7
(ASTM E112 / IS-4748)						

JOMINY HARDENBILITY IS-3848 / ASTM A255 (As per required by Customer)	Distance	1.5	3	5	7	9	11	13	15	20	25	30
	Specified	55-61	55-61	55-61	54-60	53-56	51-59	49-59	48-58	44-56	41-53	39-51
	Mill Tc	58.5	59	58	57	56.5	54.5	53.5	51.5	49	47	43
	Observed	60	59	58	57	56	54	53	52	49	48	43

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	
	N/mm2 / MPA		/MPA		CHARRY	IZOD	
	Specified		1030-1290		835 Min	10 min	25 J min
	Observed		1210-792		882.00	23.37%	34 J
As Rolled Hardness (BHN (Max / Min) (If Required In TDC / Customer)	1	2	3	4	5		

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:	1:7.56
(If Required In TDC / Customer)	As Per Mill Tc					

DECARB LEVEL: (AS PER IS 6396 / ASTM E1077)	Specified	0.6mm max	
	Observed	PD	0.22
(If Required In TDC / Customer)			

UPSETIBILITY TEST (AS PER IS 10167):	OK
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Test Certificate verified for Each Heat no.:	Available & Ok	Not Available	Not Conforming
	1		

TDC / Customer STD	SSB/TDC/	Mill Tc No	Mill Tc Date	Verified By:
(If Required In TDC / Customer)	1001 P3	K202255	21/1/25	

MIX-UP TEST (If Required In TDC / Customer)	Verified By Mobile Spectro / X-Ray Gun / Spark Test	
	Accepted	Rejected
	1	

Other Remarks	
Checked By	Approved By