



KALYANI STEELS LTD - HOSPET DIVISION
Hospet Road, Ginigera - 583228 Taluka & Dist : Koppal, Karnataka.
Telephone : 08539 - 286603-08 (6lines) Telefax : 08539 -286611
TEST CERTIFICATE

CUSTOMER: SSBENGINEERS PVT LTD						PROCESS ROUTE			TC NO. HN180699 DATE.19.03.2025		
						EOF-LRF-VD-CCM(EMS)-R.MILL			TRUCK NO:		
CUSTOMER SPECIFICATION NO		CUSTOMER P.O.NO.	HEAT NO	GRADE	SECTION (IN mm)	COLOR CODE	SUPPLY CONDITION	LENGHT (IN Mtrs.)	OVALITY (IN mm)	NO.OF PIECES	QUANTITY
DATE: 28-APR-2010, CHG NO: 17, NUMBER: 1E1120			HN180699	1E1120A	110 ROUND	WHITE BASE SPECIFICATION	AS ROLLED	4 TO 6	AS PER IS 3739	86.000	32.6

CHEMICAL COMPOSITION

	%C	%Si	%Mn	%P	%S	%Ni	%Mo	%Cr	%Cu	%Al	%Sn	%V	N ₂ ppm	O ₂ ppm	H ₂ ppm	%Ti	CaPPM	Bppm	%As	%Sb	%Pb
REQ	0.190/0.230	0.180Max	0.800/1.100	0.020Max	0.015/0.025		0.080/0.250	0.450/0.700	0.350Max	0.020Min	0.030Max								0.030Max		0.020Max
ACT	0.2100	0.1700	1.0300	0.0070	0.0250		0.1700	0.6200	0.0400	0.0200	0.0030								0.0031		0.0016

MECHANICAL PROPERTIES

	TENSILE VALUES				IMPACT STRENGTH (IZOD/CHARPY)	HARDNESS (BHN)	JOMINY VALUES (HRC)										D.I. VALUE MM
	YS	UTS	%EL	%RA			J1.5mm	J5mm	J13mm								
REQ							43/48	34Min	29Max								45.700/58.400
ACT							45.9	40.9	24.7								54.83

METALLURGICAL PROPERTIES

	SPARK/ SPECTRAL TEST	STEP DOWN TEST	MACRO ETCH RESULTS(ASTM E-381)	INCLUSION RATING (ASTM - E - 45) Method 'A' Plate I(Worst Fields)								GRAIN SIZE (ASTM E-112)	SURFACE DEFECT LEVEL (mm)	CORE HARDNESS (OILQUENCH (HRC)	UPSET TEST RESULTS	TOTAL DEPTH OF DECARBURIZATION IN mm
				A		B		C		D						
				T	H	T	H	T	H	T	H					
REQ	OK	NA	C2R2S2Max	3.0	2.0	2.0	1.0	0.5	0.5	1.0	1.0	5 to 8	OK	NA	NA	NA
ACT	OK	NA	<C2/R2/S2	2.0	1.0	0.5	0.0	0.0	0.0	1.0	0.5	7.5	OK	NA	NA	NA

REMARKS: 1.BLOOM SIZE:240X280MM2.REDUCTION RATIO:1:7.07. 2.MPI TEST:100% DONE & FOUND OK. 3.ULTRASONIC TEST:OK AS PER ASTM A 388. 3MM FBH 4."MATERIAL FREE FROM RADIOACTIVE ELEMENTS".																
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Apuril

PREPARED BY

QF.NO.HS / QA/ 10.01 DG.Rev.01 Dtd : 23.02.2015

PK.Biswal
(P.K.Biswal)

AUTHORISED SIGNATORY

PK.BISWAL(VP-QAD)