



KALYANI

ESTABLISHED 1980

KALYANI STEELS LTD - HOSPET DIVISION

Hospet Road, Ginigera - 583228 Taluka & Dist : Koppal, Karnataka.

Telephone : 08539 - 286603-08 (6lines) Telefax : 08539 -286611

TEST CERTIFICATE

CUSTOMER: KALYANI STEELS LTD

Delivery.No: 8300049739

PROCESS ROUTE

EOF-LRF-VD-CC(MEMS)-R.MILL

TC NO. K124118 DATE:07.06.20
TRUCK NO: RJ02GB3329

CUSTOMER SPECIFICATION NO	CUSTOMER P.O.NO.	HEAT NO	GRADE	SECTION (IN mm)	COLOR CODE	SUPPLY CONDITION	LENGTH (IN Mtrs.)	OVALITY (IN mm)	NO.OF PIECES	QUANTITY
		K124118	ZFTB	83 ROUND	HALF (RED+YELLOW)	AS ROLLED	4 TO 6	AS PER IS 3739	117	29.7

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	%
REQ 0.150/0.200	0.300Max	1.100/1.400	0.025Max	0.020/0.035	0.300Max	0.080Max	1.000/1.300	0.300Max	0.028/0.050	0.030Max		90.0Min	25.00Max		0.005Max	30.000Max	10.000/30.0		0.005Max	
ACT 0.1600	0.2430	1.1820	0.0150	0.0220	0.1950	0.0670	1.2300	0.1150	0.0290	0.0010	0.0038	126.000	10.000	1.570	0.0020	3.0000	18.0000	0.0024	0.0001	

MECHANICAL PROPERTIES

TENSILE VALUES				IMPACT	HARDNESS	JOMINY VALUES (HRC)										D.J.
YS	UTS	%EL	%RA	STRENGTH (IZOD/CHARPY)	(BHN)											VAL
REQ																
ACT																

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 (OIL QUENCH (HRC))	UPSET TEST RESULTS	TOTAL DEPTH OF DECARBURIZATION IN mm
			A	T	H	B	T	H	C	T	H	D	T	H	
REQ	OK	NA									5 and finer	OK	NA	NA	NA
ACT	OK	NA	<C2/R2/S2								100.0	OK	NA	NA	NA

REMARKS: 1 BLOOM SIZE:240X280MM2 REDUCTION RATIO:1:1.2.43

5 ACT %NB 0.0018
6 "MATERIAL IS FREE FROM RADIOACTIVE ELEMENTS".

2 ROLLED PRODUCT SIZE :83MM DIA
3 K4(OXIDES)<25, ACT:NIL
4 ACT : GRAIN SIZE 100%

PREPARED BY

AUTHORISED SIGNATORY

K. P. Srinivas

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

K.POMESHG(M-0AD)