



SLR METALIKS LIMITED

Sy.No.632, Narayanadevarakere, H.B.Halli, Tq. Bellary District, 583 222

TEST CERTIFICATE



RNS-SLRM

CUSTOMER NAME	PROCESS ROUTE			BLOOM SIZE (mm)	SUPPLY CONDITION		TC NO.	INVOICE NO.	DATE
M/S SSB ENGINEERS PVT.LTD.	MBF-E0F-LRF-VD-CGM-EMS-AML-C-RMS			200x200	As Rolled		25030196	SE24Y-16461	05-Mar-2025
CUSTOMER SPECIFICATION	HEAT NO.	GRADE	SIZE (mm)	REDUCTION RATIO	LENGTH (mm)	COLOUR CODE	QUANTITY (MT)	BUNDLE	VEHICLE NO.
Refer Remarks	54448	16MnCr5	80 DIA	7.96:1	5500 TO 6000	PINK + GREEN	17.310	10	JH05DJ0699

1. CHEMICAL COMPOSITION																													
%	C	Si	Mn	P	S	Cr	Mo	Ni	Al	Alsol	V	Ti	Cu	B	Nb	Ca	As	Sb	Sn	Pb	W	Bi	Co	Zr	AlN2 Ratio	H2 (ppm)	N2 (ppm)	O2 (ppm)	
Min	0.130	0.150	1.000	-	0.015	0.800	-	-	0.020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.100	-	60.0	-	
Max	0.180	0.400	1.300	0.020	0.030	1.100	0.000	0.300	0.050	-	-	-	0.300	0.0005	-	0.0010	-	-	-	-	-	-	-	-	-	-	2.50	120.0	20.0
Actual	0.168	0.220	1.210	0.013	0.021	1.006	0.006	0.016	0.026	0.021	0.006	0.0027	0.020	0.0004	0.0008	0.0005	0.0020	0.0001	0.0008	0.0010	0.0001	0.0001	0.0052	0.001	2.880	1.43	90.2	12.4	

2. PHYSICAL PROPERTIES										3. JOMINY HARDENABILITY (in HRC)																																																																												
TENSILE PROPERTIES (Quenched & Tempered) ASTM A370					IMPACT TEST (Quenched & Tempered) ASTM E23					HARDNESS					JOMINY DISTANCE UNIT: mm (STANDARD: JIS 3848)																																																																							
YS MPa		UTS Mpa		% EL	% RA	(Charpy) (V-Notch 2mm) (RT) Joules				As Rolled (BHN)																																																																												
Min		735		1030		8				25		Min					-					Min																																																																
Max		-		1370		-				-		Max					260					-					Max																																																											
Actual		1042		1159		15.3		54.2		37.1		Actual					165-170					-					Actual																																																											
																						J1.5					J5					J10					J15					J20					J25					J30					-					-					-					-					-					-				

4. METALLOGRAPHY										5. OTHER TESTS									
INCLUSION RATING (ASTM E45)					DIN RATING (As Per DIN 50602)					GRAIN SIZE					TOTAL DECARB (mm)				
A	B	C	D	DS															
T	H	T	H	T	H	H	H			S	O	S+O	(ASTM E112)	ASTM E-1077	(ASTM E-381)	(IS 4075)			
Spec	2.0	1.5	2.0	1.0	0.5	1.0	1.0	-	-	-	-	-	-	-	0.60mm Max	C2,S3,R3 Max	-	-	-
Actual	1.0	0.0	0.5	0.0	0.0	1.0	0.0	-	-	-	-	-	-	-	0.23	Better Than C2R2S2	OK	-	-

6. REMARKS										7. THE material is comply with ROHS (Pb, Cd, Hg, Cr+6) permissible limits.									
1. Dimension tolerance: as per IS 3739 Grade - II										2. Microstructure: Uniform Ferrite + Pearlite									
3. Banding is Ok As per UNI 8449:1983 Grade IV.										4. 100% MPI done as per ASTM E1444-12 & found Ok.									
5. 100% UT done as per ASTM A388 & found Ok.										6. The material is conforming to the customer specification.									
7. Inspection Certificate as per EN10204:2004, type 3.1										8. Cust Spec As per mail dtd 18.03.2021 From Mr. Panchanan Mishra. QF 1001, Rev3, Dtd 14.06.2024									

Asishd Khan Prepared By	Prashant Reviewed & Issued By	Prashant Angadi Authorised Signatory
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