



# SLR METALIKS LIMITED

Sy.No.632, Narayandevanakere, 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-EOF-LRF-VD-COM- (EMS/AMLC)-RMS		200x200		As Rolled		25031769		SE24V-18096		31-Mar-2025																											
CUSTOMER SPECIFICATION		HEAT NO.		GRADE		SIZE (mm)		REDUCTION RATIO		LENGTH (mm)		COLOUR CODE		QUANTITY (MT)		BUNDLE		VEHICLE NO.																					
Fast Auto 52414/01, Dated 11.02.2002		53061		20MNCR3HL		80 DIA		7.96:1		5500 TO 6000		Yellow+Blue		16.900		09		NL01AF3609																					
1. CHEMICAL COMPOSITION																																							
	C	Si	Mn	P	S	Cr	Mo	Ni	Al	V	Ti	Cu	B	Nb	Ca	As	Sb	Sn	Pb	W	Bi	Co	Zr	AlN2 Ratio	H2 (ppm)	N2 (ppm)	O2 (ppm)												
Min	0.170	0.150	1.100	-	0.020	1.000	-	-	0.020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.000	-	-	-											
Max	0.220	0.400	1.400	0.035	0.040	1.300	-	-	0.040	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00	90.0	20.0	-											
Actual	0.197	0.239	1.210	0.015	0.022	1.140	0.009	0.019	0.024	0.007	0.0031	0.019	0.0003	0.0007	0.0006	0.0010	0.0001	0.0005	0.0010	0.0001	0.0001	0.0001	0.0047	0.001	3.380	1.13	71.0	15.6	-										
2. PHYSICAL PROPERTIES																																							
TENSILE PROPERTIES (Quenched & Tempered) ASTM A370										IMPACT TEST (Quenched & Tempered) - (Charpy) (V-Notch 2mm) (RT) Joules					HARDNESS As Rolled (BHN)					JOMINY DISTANCE UNIT: mm (STANDARD: -)																			
YS MPa	UTS MPa	% EL	% RA						25										J1.5 J3 J5 J7 J9 J11 J13 J15 J20 J25																				
Min	885	1200	8						Min										41.0 39.0 37.0 34.0 31.0 29.0 27.0 26.0 23.0 21.0																				
Max	-	1420	-						Max										46.0 45.0 43.0 41.0 38.0 36.0 34.0 33.0 31.0 30.0																				
Actual	1153	1267	15.6	47.5					37.2					Actual					44.7 43.3 40.5 37.9 34.0 31.6 29.3 28.8 27.2 25.3																				
4. METALLOGRAPHY																																							
INCLUSION RATING (ASTM E45 Method A)										DIN RATING (As Per DIN 50602)					GRAIN SIZE					TOTAL DECARB (%)					MACRO-STRUCTURE					STEP DOWN					UPSET				
A B C D DS										S O S+O					(ASTM E112)					ASTM E-1077					(ASTM E-381)														
Spec	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
Actual	1	0.5	0.5	0	0	0.5	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
5. OTHER TESTS																																							
100% Bars Checked by Manual UT - Found OK																																							
100% Bars Checked by MPI - Found OK & Material is free from surface defects																																							
100% Bars checked for Mix-Up by PMI & Spark - Found OK																																							
Material is free from radioactive contamination																																							
6. REMARKS																																							
1 Dimension tolerance: as per IS 3739 Grade - 1																																							
2 Microstructure: Uniform Ferrite + Pearlite																																							
3 The material is comply with ROHS (Pb,Cd,Hg,Cr+6) permissible limits.																																							
4 Material is conforming to the customer specification.																																							
3 Inspection Certificate as per EN10204:2004, type 3.1																																							
Prepared By: Divakar H																																							
Reviewed & Issued By: Prashant																																							
Authorised Signatory: Prashant Angadi																																							