



SLR METALIKS LIMITED

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

TEST CERTIFICATE



TEST SLR

CUSTOMER NAME		PROCESS ROUTE		BLANK SIZE (mm)		SUPPLY CONDITION		TC NO.		INVOICE NO.		DATE																											
M/S SSB ENGINEERS PVT.LTD.		MBF-EOF-1,RF-VD-COM-EMS-AMLC-RMS		200x200		As Rolled		22040414		9225V-0477		15-Apr-2025																											
CUSTOMER SPECIFICATION		HEAT NO.		GRADE		SIZE (mm)		REDUCTION RATIO		LENGTH (mm)		COLOUR CODE																											
Refer Remarks		55198		30CRMN5		80 DIA		7.9G:1		5530 TO 6000		ORANGE																											
QUANTITY (MT)		32.510		BUNDLE		VEHICLE NO																																	
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	Zn	AlN3 Ratio	H2 (ppm)	N2 (ppm)	O2 (ppm)												
Min	0.330	0.150	0.800	-	0.015	1.000	-	-	0.020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.10	-	60.0	-											
Max	0.400	0.400	1.100	0.020	0.030	1.300	0.100	0.300	0.050	-	-	0.300	0.0005	-	0.0010	-	-	-	-	-	-	-	-	-	-	2.50	120.0	20.0											
Actual	0.373	0.262	1.040	0.017	0.020	1.240	0.009	0.019	0.033	0.006	0.0037	0.018	0.0004	0.0010	0.0006	0.0010	0.0002	0.0012	0.0010	0.0001	0.0001	0.0001	0.0001	0.0001	4.13	1.25	73.2	15.4											
2. PHYSICAL PROPERTIES														3. JOMINY HARDENABILITY (in HRC)																									
TENSILE PROPERTIES (Quenched & Tempered) ASTM BSM		IMPACT TEST		HARDNESS		JOMINY DISTANCE UNIT: mm (STANDARD: -)																																	
YS MPa	UTS MPa	% EL	(Charpy) (RT) Joules	As Rolled (BHN)		J1.5	J3	J5	J7	J9	J11	J13	J15	J20	J25	J30																							
Min	685	880	12	-	Min	52.5	52.0	51.0	50.0	47.5	45.5	44.0	42.5	39.5	37.5	36.0	-	-	-	-	-	-	-	-	-	-	-												
Max	-	1080	-	-	Max	58.0	58.0	57.0	56.0	55.0	54.0	54.0	53.0	50.0	48.0	46.0	-	-	-	-	-	-	-	-	-	-	-												
Actual	960	1048	21.2	-	Actual	56.3	54.2	52.3	51.6	50.2	49.1	47.2	44.2	41.1	39.0	36.9	-	-	-	-	-	-	-	-	-	-	-												
4. METALLOGRAPHY		INCLUSION RATING (ASTM E4E-13)		DIN RATING (As Per DIN 50602)		GRAIN SIZE		TOTAL DECARB (%)		MACRO-STRUCTURE		STEP DOWN		UPSET		100% Bars Checked by UT - Found OK																							
A		B		C		D		DS		S		O		S+O		(ASTM B112)		SAE J419		(ASTM E-381)		(IS 1073)						100% Bars Checked by MPI - Found OK & free from surface defects											
T		H		T		H		H		H		H		H		H		5-8		0.6% of dia		C2,S2,R2 Max		-		-		Material is free from radioactive contamination											
Spec		2.0		1.5		2.0		1.0		0.5		1.0		1.0		1.0		-		-		-		-		-													
Actual		1.0		0.5		0.5		0.0		0.0		1.0		0.0		-		-		-		-		-		-													
6. REMARKS		1. Cust Spec TDS No. 01, Rev No. 01, Rev date 07.03.2021		2. (Ref Std: DANA QF 1001, Rev 03, Date 14.06.2024)		3. Dimension tolerance: as per IS 3739 Grade - 1		4. Microstructure: Uniform Ferrite + Pearlite		5. The material is comply with ROHS (Pb,Cd,Hg,Cr+6) permissible limits.		6. Material is conforming to the customer specification.		7. Inspection Certificate as per EN10204 2004, type 3.1																									
Prepared By		Divakar H		Reviewed & Issued By		Jagadeesh		Authorised Signatory		P. Anand Angadi																													