

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



TEST CERTIFICATE

CUSTOMER NAME		PROCESS ROUTE			BLOOM SIZE (mm)	SUPPLY CONDITION		TC NO.			DATE																					
M/S SSB ENGINEERS PVT		MBF-EOF-LRF-VD-CCM(EMS-AMLC)-RMS			200x200	As Rolled		24110814			21.11.2024																					
CUSTOMER SPECIFICATION		HEAT NO.	GRADE	SIZE (mm)	REDUCTION RATIO	LENGTH (mm)	COLOUR CODE	INVOICE NO.	QTY (MT)	BUNDLE	VEHICLE NO.																					
DANA Specifications QF1001, Rev No.02, Dtd: 12.05.2020		50562	20MNCR5	50 DIA	20.37:1	5770+40	Yellow + Brown	SE24Y-10424	5.420	3	RJ53GA0642																					
I. CHEMICAL COMPOSITION																																
%	C	Si	Mn	P	S	Cr	Mo	Ni	Al	Cu	Ca	N2 (ppm)	H2 (ppm)	O2 (ppm)	B	AIN2R atio																
Min	0.150	0.150	1.000	-	0.015	1.000	-	-	0.020	-	-	60.0	-	-	-	2.1	-															
Max	0.200	0.400	1.300	0.020	0.030	1.300	0.100	0.300	0.050	0.300	0.0010	120.0	2.50	20.0	0.0005	-	-															
Actual	0.194	0.220	1.240	0.011	0.020	1.240	0.005	0.013	0.027	0.021	0.0006	92.1	1.76	11.4	0.0004	2.9	-															
II. PHYSICAL PROPERTIES												III. JOMINY HARDENABILITY (in HRC)																				
Tensile Properties (Quenched & Tempered) (ASTM A370)				Impact Test (Charpy)				Hardness				(Distance Unit: mm) (Standard: ASTM A255)																				
YS (MPa)		UTS (MPa)		% EL		% RA		(Charpy V-Notch)(J)				As Rolled (BHN)																				
Min	930	1230		7		-		25				Min	-																			
Max	-	1570		-		-		-				Max	240																			
Actual	1051	1248		15.8		42.7		38				Actual	172-176																			
IV. METALLOGRAPHY												V. OTHER TESTS																				
Inclusion Rating (ASTM E45 Method A)										Inclusion Rating (As per DIN 50602)			Grain Size	Total Decarb (mm)	Macrostructure	Step Down	Upset	100% Bars Checked by Manual UT - Found OK														
A		B		C		D		DS				(ASTM E112)	ASTM E-1077	(ASTM E-381)	(IS 4075)	-	100% Bars Checked by MPI - Found OK & Material is free from surface defects															
T	H	T	H	T	H	T	H		S	O	S + O																					
Spec	2.0	1.5	2.0	1.0	0.5	0.5	1.0	1.0	-	-	-	-	S-8	0.60 Max	C2,R3,S3 Max	-	-	100% Bars checked for Mix-Up by PMI & Spark - Found OK														
Actual	1.5	0.5	0.5	0	0	0	1	0	-	-	-	-	7	0.22	Better Than C2R252	OK	-	Material is free from Radioactive contamination														
VI. REMARKS:																																
Dimension tolerance: as per IS 3739 Grade - 1																																
Microstructure: Uniform Ferrite + Pearlite																																
Banding is Ok As per UNI S449																																
The material is comply with ROHS (Pb,Cd,Hg,Cr+6) permissible limits.																																
Material is conforming to the customer specification.																																
Inspection Certificate as per EN10204:2004, type 3.1																																
Arshad Khan Prepared By												NAVEEN M Reviewed & Issued By																				
Ranjan Das Authorised Signatory																																