SLR Metaliks Limited

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

SLR metaliks Powered by Passion

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	24120840	19-Dec-24

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-12002	7.430	4	JH05DN2199

I. CHEMICAL COMPOSITION

%	C	Si	Mn	P	S	Cr	Mo	Ni	Al	Cu	Ca	N2 (ppm)	H2 (ppm)	O2 (ppm)	B	AlN2Ratio	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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

	Tensile Properties (Quenched & Tempered) (ASTM A370)				Impact Test (Charpy)	Hardness		
	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	-

III. JOMINY HARDENABILITY (in HRC)

(Distance Unit: mm) (Standard : ASTM A255)

	J1.5	J5	J10	J15	J20	J25	J30	-	-	-	-	-	-	-	-	-
Min	41.0	38.0	32.0	29.0	27.0	25.5	24.5	-	-	-	-	-	-	-	-	-
Max	46.0	44.0	38.5	35.5	33.5	32.0	31.0	-	-	-	-	-	-	-	-	-
Actual	45.5	42.5	38.2	32.8	27.8	26.7	24.5	-	-	-	-	-	-	-	-	-

IV. METALLOGRAPHY

	Inclusion Rating (ASTM E45 Method A)									Inclusion Rating (As per DIN 50602)			Grain Size	Total Decarb (mm)
	A		B		C		D		DS	-				
	T	H	T	H	T	H	T	H		S	O	S+O	(ASTM E112)	ASTM E-1077
Spec	2.0	1.5	2.0	1.0	0.5	0.5	1.0	1.0	-	-	-	-	5-8	0.60 Max
Actual	1.5	0.5	0.5	0	0	0	1	0	-	-	-	-	7	0.22

V. OTHER TESTS

Macrostructure	Step Down	Upset
(ASTM E-381)	(IS 4075)	-
C2,R3,S3 Max	-	-
Better Than C2R252	OK	-

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

VI. REMARKS:

Dimension tolerence: as per IS 3739 Grade - 1

Microstructure: Uniform Ferrite + Pearlite

Banding is Ok As per UNI 8149

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

SSB ENGINEERS (P) LTD

24/12/24

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