

## LIKS LIMITED

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

## TEST CERTIFICATE

CUSTOMER NAME M/S SSB ENGINEERING PVT	P MBF-EOF-1	PROCESS ROUTE MBF-EOF-LRF-VD-CCM-EMS-AMLC-	MS-AMLC-	BLOOM SIZE S (mm) S	SI	SUPPLY CONDITION As Rolled	NDITION		To 250	TC NO. 25030359	INVOICE NO. SE24Y-16625	E NO.	INVOICE NO. DATE  SE24Y-16625 08-Mar-2025
M/S SSB ENGINEERING TVT	WILL BOH	RMS	MS-AMLC-	200×200		As Rolled	lled		250	030359	SE24Y-	16625	08-Mar-2025
CUSTOMER SPECIFICATION	HEAT NO.	G	SIZE	REDUCTION	LENGTH	Ω	COLOUR CODE	ODE	QUAN	QUANTITY (MT)	BUNDLE		VEHICLE NO.
Refer Remarks	54466	35CRMN5	60 DIA	14.15:1	5.50 - 6.00		ORANGE		ω	32.420	16		RJ02GC5355
1. CHEMICAL COMPOSITION					0.00						-		
I. CHEMICAL COME OSITION													
% C Si Mn P S Cr Mo	Mo Ni	A1 -	V Ti(%) Cu	) Cu B(%)	B(%) Nb Ca(%)	A <sub>B</sub> Sb	Sn	Sn Pb W	W Bi	င္ပ	Zr AIN2	(nnm)	AJN2 H2 N2 O2
						-					Orner	(1777.1)	( 10 Part   / 10 Part

0.330

0.150 0.800

0.030 0.015

0.020

		-	tory	Authorised Signatory	Author		RIR	The same	1	3.		Mruthyunjaya Reviewed & Issued By	M: Reviev						Arshad <b>Kha</b> n Prepared By	Arshad Khan Prepared By				
			•	Be	R		A.J	12	San Art	S.B.		Restrict.	.Z						- Was					
		-	)				Ħ	G151		EN		-					pe 3.1	004, ty	10204:2	per EN	ificate as	5. Inspection Certificate as per EN10204:2004, type 3.1	5. Inspe	
							,	X	1	CI							ation.	specific	stomer	o the cu	forming t	Material is conforming to the customer specification	1	4.
								1	ATRS (						le limits	The material is comply with ROHS (Pb,Cd,Hg,Cr+6) permissible limits	,Cr+6)	,Cd,Hg	HS (Pb	with RC	comply	naterial is		ب
					2024)	DANA QF 1001, Rev 03, Date 14.06.2024)	)3, Dat	l, Rev (	⊋F 100:	DANA	(Ref Std: I	7. (R						ite	+ Pear	Ferrite	Uniform	Microstructure: Uniform Ferrite + Pearlite		2
						03.2021	te 07.0	Rev da	01, Rev No. 01, Rev date 07.03.2021	1, Rev		6. TI				i.	= , =	de - 1	739 Gra	per IS 3	ence: as	Dimension tolerence: as per IS 3739 Grade - 1	. Dime	Ŀ
																						uks	6. REMARKS	6.
								,	OK	an	Better Than C2R2S2	0.20	8		,		-	'	0 0	0 1.0	0 0	0.5 0.5	Actual 1.5	Act
	unation	ontam	ctive c	Material is free from radioactive contamination	free fro	aterial is	M		1	Max	C2,S2,R2 N	0.6%of dia C	5-8 0.0	CT.			1	, 	0 1.0	0.5 1.0	1.0 0.5	1.5 2.0	2.0	Spec
- Foun	& Spark - Found OK	PMI	-Up by	100% Bars checked for Mix-Up by PMI	checked	0% Bars	10		(IS 4075)		(ASTM E-381)		E112) S.	E A	8+0	0	ß		н	н н	T H	н т	н	THE S
from s	100% Bars Checked by MPI - Found OK & free from surface defects	nd OI	I - Fou	d by MP	Checke	100% Bars defects	10 de					(%)				1	77	DS	ם	С		A B		
		d OK	- Foun	100% Bars Checked by UT - Found OK	Checke	0% Bars		UPSET	STEP		MACRO- STRUCTURE	TOTAL DECARB S	GRAIN 7	GF S:	302)	DIN RATING (As Per DIN 50602)	DI (As F		൧	RATING 245-13)	INCLUSION RATING (ASTM E45-13)	15		
			75							TESTS	5. OTHER TESTS	CT.									Y	4. METALLOGRAPHY	METAL	4.
'	6 39.3	41.6	44.2	1 48.3	.0 49.1	52.5 52.0	54.0 5	55.7   5	56.2	57.5	Actual	)-(2.5)	209-215	Actual		1		'		19.5	1065	970	Actual	Act
	0 46.0	48.0	50.0	0 53.0	.0 54.0	55.0 54.0	56.0 5	57.0 5	58.0	58.0	Max		240	Max		J		'			1080	1	ex.	Max
,	5 36.0	37.5	39.5	0 42.5	.5 44.0	47.5 45.5	50.0 4	51.0 5	52.0	52.5	Min	-	٠	Min		ı		'		12	880	685	lin	Min
•	J30	J25	J20	3 Ј15	1 Ј13	J9 J11	J7 .	J5	Ј3	J1.5			As Rolled (BHN)					W.		% EL	UTS Mpa	YS MPa		
					)- ·	JOMINY DISTANCE UNIT: mm (STANDARD: -)	am (ST.	UNIT: n	TANCE	INY DIS	JOMI	SSE	HARDNESS		Н	IMPACT TEST	IMI		ES TM E8M	OPERTI ered) AS	TENSILE PROPERTIES (Quenched & Tempered) ASTM E8M	TE (Quenche		
						(RC)	Y (in H	ABILIT	3. JOMINY HARDENABILITY (in HRC)	MINY	3. JC										RTIES	2. PHYSICAL PROPERTIES	PHYSIC	2.
82.4	1.16 89		01 4.150	0.0010 0.0001 0.0007 0.0010 0.0001 0.0001 0.0056 0.001	0.0	0.0 0.0	010 0.	0007 0.0	.0001 0.	0.0010		0.0003 0.0008 0.0007	0.006 0.0035 0.018 0	0.00	- 0.0	0.034	7 0.018	4 0.007	24 1.264	0.013 0.024	1.080 0.	78 0.260	ual 0.378	Actual
120.0 20.0	2.50   12	2		<u>.</u>		1		1	•	ı	0.0010	0.0005 -	0.300		-	0.300 0.050		1.300 0.100	30 1.30	020 0.030	1.100 0.020	00 0.400	0.400	Max

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The State



60.0

(ppm)