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



TEST CERTIFICATE

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		cous	MOL	CUSTOMER NAME	AME					PR	OCESS	PROCESS ROUTE	E E		(1)	(mm)			SUP	SUPPLY CONDITION	TIGNC	NO			TC	TC NO.		INVO	INVOICE NO.	0.	DA	DATE
and the second	S/W.	SSB I	NGI	M/S SSB ENGINEERS PVT.LTD	SPVT	LTD			MBF-I	OF-L	RF-VD-C	MBF-EOF-LRF-VD-CCM-EMS-AMLC- RMS	MS-AN	1LC-	200	200×200				As Rolled	olled				2502	250201191		SE24	SE24Y-15578	78	20-Feb-2025	5-2025
and the state of the state of	CU	STOM	ER S	CUSTOMER SPECIFICATION	ICAT	NOI			HEAT NO.	NO.	GRADE	DE	SIZE (mm)	20	REDU	REDUCTION RATIO		(meter)	H	0	COLOUR CODE	R COD	E	Q	QUANTITY (MT)	V) ALI	(T)	ви	BUNDLE		EHIC	VEHICLE NO.
and of our papers of the last	The paper of both the section of	F	lefer F	Refer Remarks	S				54186	6	35CRMN5	MN5	80 DIA	IA	7.	7.96:1	60	5.50 - 6.00	8		ORANGE	NGE		-	31.	31.180			18		JH05DJ4499)J4499
1. OH	CHEMICAL COMPOSITION	COV	IPOSI	NOLL																				1000								
M	C	Si	Mn	=	P	S	Cr		Mo	Z	Al	•	V	Ti(%)) Cu	B(%)	Nb	Ca(%)	As	Sb	Sn	Pb		W	Bi	Co	Zr	AIN2 Ratio	-	(ppm) ((ppm)	(ppm)
Min	0.330	0.150	0.800	8		0.015	1.000	0		'	0.020	,	,	-	1	•	,	,			-			'	'	,	,	2.100	ŏ	<u> </u>	60.0	
Мах	0.400	0.400	1.100		0.020	0.030	1.300		0.100	0.300	0.050	,		,	0.300	0.0005	ı	0.0010		1	_			'	١,	٠.	,		2.	2.50	120.0	20.0
ctual	0.383	0.255	1.050		0.014	0.025	1.265		0.010 0	0.026	0.028	-	0.007	0.0043	0.017	0.000	3 0.000	0.0003 0.0006 0.0007 0.0010 0.0001 0.0002 0.0010 0.0001 0.0001 0.0059 0.001	0,001	0.000	0.00	02 0.00	0.0	0 1000	.0001	0.0059	0.00	3.680	1.78	-	76.2	14.2
PH	PHYSICAL PROPERTIES	PROF	ERT	ES														3. J	NIMO	3. JOMINY HARDENABILITY (in HRC)	DENA	BILITY	(in H	RC)								
	-	Ti	ENSIL	TENSILE PROPERTIES sched & Tempered) ASTI	OPER	TENSILE PROPERTIES (Quenched & Tempered) ASTM E8	M E8			IMPA	IMPACT TEST	ST			HARDNESS	NESS		JON	I AND	JOMINY DISTANCE UNIT: mm (STANDARD: -)	ICE U	IIT: mr	n (STA	NDAF	:							2 4/4
	YS MPa		UTS	Pa S.I	38	% EL		•		RG	(Charpy) (RT) Joules	o.		>	As Rolled (BHN)				J1.5	5 Ј3	J5	J7	, J9		J11	J13	J15	J20	J25	J30		
Min	685		880	90		12		'			25		Min	מ	٠		•	Min	52.5	5 52.0	0 51.0	0 50.0	0 47.5	├	45.5	44.0	42.5	39.5	37.5	36.0	,	
dax			1080	80		'		,			•		Max	×	240			Max	58.0	58.0	0 57.0	0 56.0	0 55.0		54.0	54.0	53.0	50.0	48.0	46.0		
ctual	972		1042	43	Ŋ	22.4					84.2		Actual	-	211-218			Actual	1 57.2	2 55.1	1 54.2	2 53.4	4 52.2	-	51.1	48.0	47.1	45.1	40.4	38.1	-	-
ME	METALLOGRAPHY	RAPI	17														-	5. OTHER TESTS	TEST	SJ			10.00								1.4	
		5	(AS	(ASTM E45-13)	RATI 45-13)	NG				DIN As Per	(As Per DIN 50602)	G (602)		GRAIN		TOTAL		MACRO- STRUCTURE		DOWN		UPSET	1000	% Bar	s Chec	ked b	100% Bars Checked by UT - Found OK	Found	OK N			
	A		В	C		U		DS			•					(%)	-		_				100% I	% Bar	s Chec	ked b	y MPI	- Foun	d OK	& free	from	100% Bars Checked by MPI - Found OK & free from surface defects
	т н	H	Ξ	rj	H	H	H		500		0	8+0	0	(ASTM E112)		ASTM E-1077		(ASTM E-38	5	(IS 4075)	5)	•	1009	% Bar	s checl	ked for	100% Bars checked for Mix-Up by PMI & Spark -	Jp by l	PMI &	Spark	- Fou	Found OK
pec	2.0 1.5	2.0	1.0	0.5	0.5	0.1	1.0				•	1		5-8		.6%of d Max		C2,S2,R2 Max	1 _{ax}	,		1	Mat	erial i	s free	from r	Material is free from radioactive contamination	ive co	ntamin	ation		
tual	1.5 0.5	0.5	0	0	0	0.5	0				•	ı		œ		0.18	В	Better Than C2R2S2	2	OK		1										
REA	REMARKS																	10 L35														
. Di	Dimension tolerence: as per IS 3739 Grade	toler	ence:	as p	er IS	3739	Grac	le - 1									6. TD:	TDS No. 01,		Rev No. (01, Rev date 07.03.2021	/ date	07.03	.2021								
M	Microstructure: Uniform Ferrite + Pearlite	ture:	Unif	orm J	Perrit	e + 1	earli	િ									7 (R	- (Ref Std: D	DAN	ANA QF 1001, Rev 03, Date 14.06.2024)	1001,	Rev 03	, Date	e 14.0	6.2024	1)						
Th	The material is comply with ROHS (Pb,Cd,Hg,Cr+6) permissible limits	ial is	com	oly wi	th R	SHO	(Pb,	Зд,Не	Cr+	6) per	missib	le limit	ţ.				- Line of the line			GRS	US IP	1										
M	Material is conforming to the customer specification.	conf	ormi	ng to	the c	uston	ner s	ecific	ation	•							-		G.	5		0)										
lns	Inspection Certificate as per EN10204:2004, type 3.1	Cert	ficate	as p	- 약 프	V1020)4:20()4, ty	pe 3.1							`			EN	2	1000 C		` <i>:</i>			-						
				7	色	1 Whas	0								_	المحرية	.≯		s.B	The Later		80	YAJ			ST.	12		-			
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e-frequency (discount of the contract of	The second department			repa	repared by	~								Reviev	Reviewed & Issued By	ssued B	ч —				2	*	_	Auu	OFISCU	Authorised Signatory	ory	F		Control Control Control	-

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