

TEST CERTIFICATE

Certificate No. : 166647

Customer Name:

Cust. Address :

Date : 10.04.2025

SO No : 402681358/90

SO Date : 13.03.2025

Truck No.: NL01AJ4248

Po Number:OA NO 1006

Po date :11.03.2025

Packing Slip No :718267471

Invoice No :0093699471

GST Invoice No : 26JH2110004791

Heat No	Grade	Size (mm)	Length (mm)	ML (mm)	No. of Bundles	No. of PCS	Weight	Billet Size
E251226	SAE52100	15.00 mm DIA			6		13.292 MT	180 X 180 mm

TDC NO : MFR_1391

Process Route : BF-EAF-LRF-VD-CCM (AMLC & EMS)-RM

Specification:

BIS Equivalent Grade :

Reduction Ratio : 183.32 : 1

CHEMICAL ANALYSIS																			Prod STD No : SAE52100			
Element	C%	Si%	Mn%	P%	S%	Cr%	Mo%	Ni%	B %	V%	Cu%	Pb%	Sn%	Ti%	Nb%	Zr%	As%	Sb%	Al%	Ca %	CE%	
MIN	0.9800	0.150	0.250			1.400													0.0170			
MAX	1.1000	0.350	0.450	0.025	0.0150	1.600	0.100	0.250			0.300			0.0030					0.0600	0.0010		
Actual	0.980	0.205	0.330	0.013	0.005	1.420	0.001	0.013	0.0002	0.003	0.005	0.001	0.001	0.0029	0.001	0.000	0.001	0.000	0.027	0.0003	1.321	

Gas Levels : N ppm : [/ 80] -56

O ppm : [/ 12] -8.0

H ppm : [/ 2.00] -1.60

MECHANICAL PROPERTIES :

Tensile Test ()					Hardness Test			Impact Test ()			
Cond.					As rolled			Spec.			
Spec.	YS	UTS	Elong.	RA	As Supply	As Quenched	As Q&T	Test Temp	Imp. Value (min)	Avg.	
			%	%	BHN			°C	J	°C	J
Min											
Max											
Actual					354						

Upset Type :

Upset Test : %

Upset Result :

JOMINY HARDENABILITY ()										Ideal Diameter (DI) : [/] -									
Distance																			
MIN (HRC)																			
MAX (HRC)																			
Actual(HRC)																			

METALLURGICAL PROPERTIES & PHYSICAL INSPECTION

%C.SEG	Step Down Test		Non-metallic Inclusion K3		MPI Test	Pearlite Amount		Spark Test	Non-metallic Inclusion K4		Anti Mixup Check(100%)
Actual								100% OK			
Macro Etch Test	Micro Structure		CN		CZ Looser	CZ Closer		GBC Level	DEG. SPH		MFLT/ECT
Spec					/		/	NOT APPLICABLE			
Actual	C1R1S1	Pearlite & Cementite		5.10	7.10	6.10					
Grain Size	Decarb (mm)	Banding (μm)	A		B		C		D	DOS μm	Ultrasonic Test
Spec	5.0 /	/	/	1.0	1.0	0.5			1.0	0.5	
Actual	8.00	0.050 mm		0.50		0.50			1.00		

Inclusion Rating Test Standard: ASTM_E45_A

Macro Etch Test Standard:

Grain Size Standard: ASTM_E112

Banding Test Standard:

Decarb Standard: SAE_J419

UT Standard:

JSW COLOR CODE : PINK+WHITE

CUSTOMER COLOR CODE : PINK+WHITE

INSPECTION CERTIFICATE 3.1 ACCORDING TO EN 10204 : 2004

Supply Condition : AS ROLLED

Remarks :

Reference : WE HEREBY CERTIFY THAT THE MATERIAL SHIPPED UNDER THIS TEST CERTIFICATE DID NOT COME IN DIRECT CONTACT WITH ANY MERCURY, CADMIUM HEXAVALENT CHROMIUM CONTAINING DEVICES, FREE FROM RADIOACTIVE CONTAMINATION EMPLOYING A SINGLE BOUNDARY OF CONTAINMENT DURING THE MANUFACTURING PROCESS,TESTS, INSPECTION AND STORAGE.

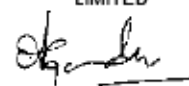
WE CERTIFY THAT CONTENTS OF THIS REPORT ARE CORRECT AND ACCURATE AND MEET THE REQUIREMENTS OF THE PURCHASE ORDER, TECHNICAL DELIVERY CONDITION, GENERAL STEEL REQUIREMENTS AND THE MATERIAL CERTIFICATION REQUIREMENTS.

NOTE:

1. THE RESULTS RELATES ONLY TO THE ITEM TESTED.
2. CERTIFICATE SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN APPROVAL OF ISSUING AUTHORITY.

For BHUSHAN POWER AND STEEL

LIMITED



ANIL KUMAR GOUDA

