

BSL**SPECTRO LAB**

&

METALLURGICAL TESTING CENTRE

(A Unit of BSL Castings Pvt. Ltd.)

(NABL ACCREDITED LAB)

WORKS & OFFICE :

PLOT NO. 263, SECTOR-24

FARIDABAD-121005 (INDIA)

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IFICATE NO.
52 & T- 1453**TEST REPORT**

BSL/SPECTRO/5.10F-01/01/00

to :	M/s. Nov Sara India (P) Ltd.	Report No.	149847	D.O.T. :	16.08.2010
	7/1, Pritam Road, Unit - II,	Ref. No.	Nil	D.O.R. :	14.08.2010
	Dehra Dun - 248001			J.O. No. :	46123
Description	Sample No. - 5110, Heat No. - S-493 C				

RESULTS

Chemical Analysis (Fe Base - LAS)
Protocol : ASTM E 1507 (By O.E.S)

Sample ID; J.O.No. - 46123/27

<u>Element</u>	<u>%</u>
Carbon	0.067
Silicon	0.142
Sulphur	0.012
Phosphorus	0.027
Manganese	0.421
Nickel	<0.05
Chromium	<0.05
Molybdenum	<0.05
Vanadium	<0.04
Copper	0.022
Tungsten	<0.02
Cobalt	<0.03
Aluminium	0.028
Titanium	<0.02
Iron	99.22

Checked By

263,
SECTOR-24,
FARIDABAD

Authorised Signatory
(Q.M. / T.M.)

- The result listed refer only to the tested samples and applicable parameters, Endorsement of product is neither inferred nor implied.
- Total Liability of our Laboratory is limited to the invoiced amount. No liability will be accepted after the sample is taken back.
- *Not Covered under NABL Scope.
- This report can not be used as an evidence in a court of law.
- Samples will be destroyed after 15 days.
- Any Complaints about this report should be communicated within 7 days of issue of this report.
- This report shall not be reproduced except in full, without the written permission of the Laboratory.



SHARU STEELS (P) LTD.

B-48 & D-251, Phase-VII, Focal Point, LUDHIANA - 141 010.

E-mail : info@sharusteels.com

E-mail : sharusteels@connect2.dsLnet

QUALITY ASSURANCE DEPARTMENT

METALLURGICAL TEST REPORT

F-QCD-03



Customer
Address

NOV SARA INDIA PRIVATE LIMITED
DEHRADUN, UTTARAKHAND

Date

05-10-2010

TEST RESULTS

CERTIFICATE NO.:

GRADE:

SIZE:

SAMPLE NO.:

HEAT NO.:

COLOUR CODE:

QTY/NO. OF BARS

MULTIPLE/FIX LENGTH

1750/10-2010

SAE 1008

56 MM

3

S 493

YELLOW

A. CHEMICAL ANALYSIS:

	C	Mn	S	P	Si	Ni	Cr	Mo	V	Al	Cu	Ti	B
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Spec: Low-
High

Obtained 0.08 0.42 0.030 0.035 0.20 0.026

B. METALLOGRAPHIC CHARACTERISTICS:

Inclusion Rating:

(In accordance with IS : 4163) Thin Thick Thin Thick Thin Thick Thin Thick

2.0 1.0 1.5 1.5

Grain Size

: High Low

(In accordance With IS : 4748)

7

C. MACRO RESULTS:

(In accordance With ASTM E-381)

OK

D. JOMINY HARDENABILITY: (In accordance with IS : 3848)

E. OTHER SPECIAL TESTS:

F. MECHANICAL PROPERTIES:

Tensile Strength	Yield Strength	% Elongation	% Area Reduction	Impact Horizontal/ Vertical	Hardness High/ Low
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3845 MPa

REMARKS:

For any Quality related issue please contact

Mr. Karanpal Singh (Technical Director)

Mobile : 98141-31288

Mr. J. P. Singh (Manager Q/C & Mkt.)

Mobile : 98550-82559

Approved By

[Signature]

AUTHORISED SIGNATORY

CHECKED BY