

BSL**SPECTRO LAB****METALLURGICAL TESTING CENTRE**

(A Unit of BSL Castings Pvt. Ltd.)

(NABL ACCREDITED LAB)

TEST REPORT**WORKS & OFFICE :**

PLOT NO. 263, SECTOR-24

FARIDABAD-121005 (INDIA)

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E-mail : castings@bsltd.net

CERTIFICATE NO.
1452 & T- 1453

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

Order to: M/s. Nov Sara India (P) Ltd.
7/1, Pritam Road, Unit - II,
Dehra Dun - 248001

Report No. 149869

D.O.T. : 16.08.2010

Ref. No. Nil

D.O.R. : 14.08.2010

Sample Description Sample No. - 5118, Heat No. - S-518 A

J.O. No. : 46123

RESULTS

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

Sample ID; J.O.No. - 46123/49

<u>Element</u>	<u>%</u>
Carbon	0.068
Silicon	0.132
Sulphur	0.012
Phosphorus	0.025
Manganese	0.426
Nickel	<0.05
Chromium	<0.05
Molybdenum	<0.05
Vanadium	<0.04
Copper	0.021
Tungsten	<0.02
Cobalt	<0.03
Aluminium	0.028
Titanium	<0.02
Iron	99.23

Checked By



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

1. The result listed refer only to the tested samples and applicable parameters, Endorsement of product is neither inferred nor implied.
2. Total Liability of our Laboratory is limited to the invoiced amount. No liability will be accepted after the sample is taken back.
3. *Not Covered under NABL Scope.
4. This report can not be used as an evidence in a court of law.
5. Samples will be destroyed after 15 days.
6. Any Complaints about this report should be communicated within 7 days of issue of this report.
7. 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.dsl.net

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

1727/10-2010

SAE 1008

65 MM

3

S 518

GREY

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 0.40 0.022 0.025 0.18

0.020

B. METALLOGRAPHIC CHARACTERISTICS :

Inclusion Rating :

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

2.0

1.5

1.0

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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5460 MPa

REMARKS :

For any Quality related issue please contact
Mr. Karan Singh (Technical Director)
Mobile : 98141-31288
Mr. J. P. Singh (Manager Q/C & Mkt.)
Mobile : 98550-32559

CHECKED BY

Approved By :

AUTHORISED SIGNATORY