

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

(A Unit of BSL Castings Pvt. Ltd.)

(NABL ACCREDITED LAB)

CERTIFICATE NO.
T - 1452 & T - 1453**TEST REPORT**

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

to :	M/s. Nov Sara India (P) Ltd.	Report No.	147106	D.O.T. :	08.07.2010
	7/1, Pritam Road, Unit - II,	Ref. No.	Nil	D.O.R. :	07.07.2010
	Dehra Dun - 248001			J.O. No. :	45416
Sample Description	Sample No. - 4979, Heat No. - S-445A				

RESULTS

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

Sample ID; J.O.No. - 45416/40

<u>Element</u>	<u>%</u>
Carbon	0.093
Silicon	0.066
Sulphur	0.013
Phosphorus	0.035
Manganese	0.373
Nickel	<0.05
Chromium	<0.05
Molybdenum	<0.05
Vanadium	<0.04
Copper	0.010
Tungsten	<0.02
Cobalt	<0.03
Aluminium	0.012
Magnesium	<0.01
Titanium	<0.02
Iron	99.33

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 UTTRAKHAND

CERTIFICATE NO. :

GRADE :

SIZE :

SAMPLE NO. :

HEAT NO. :

COLOUR CODE :

QTY/NO. OF BARS

MULTIPLE/FIX LENGTH

Date

25-08-2010

TEST RESULTS

1404/08-2010

SAE 1008

40X40 MM

1

S 445

ORANGE

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	0.15						0.029		
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B. METALLOGRAPHIC CHARACTERISTICS :

Inclusion Rating : (In accordance with IS : 4163)	A	B	C	D
	Thin	Thick	Thin	Thick

	1.5	1.5	1.0	2.0
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Grain Size	: High	Low
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(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/	Hardness	High/ Vertical
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8200-MT

REMARKS :