

**BSL****SPECTRO LAB**

&amp;

**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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CERTIFICATE NO.  
- 1452 & T- 1453

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

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

Report No. 149123  
Ref. No. Nil

D.O.T. : 05.08.2010  
D.O.R. : 04.08.2010  
J.O. No. : 45938

Sample Description Sample No. - 5066, Heat No. - 000515, RCS - 90mm

**RESULTS**

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

Sample ID; J.O.No. - 45938

| <u>Element</u> | <u>%</u> |
|----------------|----------|
| Carbon         | 0.082    |
| Silicon        | 0.183    |
| Sulphur        | 0.019    |
| Phosphorus     | 0.016    |
| Manganese      | 0.388    |
| Nickel         | <0.05    |
| Chromium       | <0.05    |
| Molybdenum     | <0.05    |
| Vanadium       | <0.04    |
| Copper         | 0.023    |
| Tungsten       | <0.02    |
| Cobalt         | <0.03    |
| Aluminium      | 0.036    |
| Titanium       | <0.02    |
| Iron           | 99.20    |

  
Checked By



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.

## TEST CERTIFICATE

|                                      |                  |                                  |        |
|--------------------------------------|------------------|----------------------------------|--------|
| Product/Size :                       | 90X90 mm Billets | Customer :                       |        |
| T.C.No.: QMS/R/QAD/RM/20/M001469 - 3 | Dt. 23/11/2010   | NOV SARA INDIA PVT. LTD. UNIT-II |        |
| Order No. EMSB268008020              |                  | DEHRADUN                         |        |
| Invoice No.: 2010000992              |                  |                                  |        |
| Wagon/Truck No.: HR37B 0267          |                  | Invoice Wt.(T):                  | 16.860 |

|                          |         |
|--------------------------|---------|
| HEAT NO                  | 000515  |
| No. Of<br>Pcs/Bundles    | 2       |
| C %                      | 0.08    |
| Mn %                     | 0.44    |
| P %                      | 0.018   |
| S %                      | 0.017   |
| Si %                     | 0.240   |
| Al %                     | 0.035   |
| C.E.<br>(IF APPLICABLE)  | 0.16    |
| YS (N/mm <sup>2</sup> )  | NA      |
| UTS (N/mm <sup>2</sup> ) | NA      |
| %EL                      | NA      |
| %RA                      | NA      |
| OTHERS                   | NA      |
| BEND TEST                |         |
| GRADE                    | SAE1008 |

AVERAGE WEIGHT OF EACH BUNDLE IS 8.430 TONS APPROXIMATELY  
The material supplied conform to the standard rolling and weight tolerances.

for (SAE1008 & TD)  
Visakhapatnam Steel Plant  
RASHTRIYA ISPAT NIGAM LTD.  
(A GOVT. OF INDIA ENTERPRISE)  
1st Floor, 27 F.C. ROAD  
DEHRADUN-248 001