

BSL**SPECTRO LAB**

CERTIFICATE NO.
T - 1452 & T - 1453

METALLURGICAL TESTING CENTRE

(A Unit of BSL Castings Pvt. Ltd.)

(NABL ACCREDITED LAB)

TEST REPORT

WORKS & OFFICE :

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

Issued to :	M/s. Nov Sara India (P) Ltd. 7/1, Pritam Road, Unit - II, Dehra Dun - 248001	Report No.	160979	D.O.T. :	17.01.2011
		Ref. No.	Nil	D.O.R. :	15.01.2011
Sample Description	Sample No. - 5544, Heat No. - D-0737, Dia - 56.0mm			J.O. No. :	48803

RESULTS

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

Sample ID; J.O.No. - 48803/4

<u>Element</u>	<u>%</u>
Carbon	0.075
Silicon	0.556
Sulphur	0.023
Phosphorus	0.028
Manganese	1.102
Nickel	10.210
Chromium	16.79
Molybdenum	2.046
Vanadium	0.041
Copper	0.264
Tungsten	0.039
Cobalt	0.151
Aluminium	<0.01
Titanium	<0.02
Iron	68.66

Checked By

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

- Note :
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.

**MATERIAL TEST CERTIFICATE**

TC NO-KSL-1705/10-11	Date : 23.12.2010	Customer : M/S NOV SARA INDIA PVT LTD
Heat No. D -0737		DEHRADUN
Specification:- AISI 316	P.O. No.: B / KES / 257 / 10 Dt. 03.05.2010	INVOICE NO: 493 Date 23.12.2010

SL. NO.	ITEM DESCRIPTION & DRAWING NO.	QUANTITY NOS
1	AISI 316 Round Dia 56 mm {FB 765}	76

CHEMICAL COMPOSITION

PERCENT	C	Mn	Si	P	S	Cr	Ni	Mo	Cu	Ti	Al	V
AS PER SPEC. Min. (%)						16.00	10.00	2.00				
Max. (%)	0.080	2.00	1.00	0.045	0.03	18.00	14.00	3.00				
Actual Value	0.059	1.37	0.54	0.035	0.024	16.23	10.14	2.12				

HEAT TREATMENT

Condition	Temp. C	Soaking Time Hrs.	Cooling Medium

PHYSICAL PROPERTIES

MECHANICAL PROPERTIES	Y.S. N/mm ²	U.T.S. N/mm ²	ELONG % GL mm	REDN IN AREA %	BEND	HARDNESS BHN	IMPACT (Joules)
AS PER SPEC. Min.							
Max.							
Actual Value							

We hereby certify that the items mentioned above have been tested and inspected in our presence and are found to be in accordance with the drawing, specifications, and purchase order.

REMARK

Sign of the Inspecting Officer
Head Office

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Sign of the Chief of Quality Control

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