

BSL**SPECTRO LAB**

METALLURGICAL TESTING CENTRE
 (A Unit of BSL Castings Pvt. Ltd.)
 (NABL ACCREDITED LAB)

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CIFICATE NO.
 452 & T- 1453

TEST REPORT

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

to :	M/s. Nov Sara India (P) Ltd.	Report No.	130228	D.O.T. :	30.10.2009
	7/1, Pritam Road, Unit - II	Ref. No.		D.O.R. :	
	Dehra Dun - 248001		1358		30.10.2009
Description:	Sample No. - 3863, Heat No. - B-0207, Dia - 45.0mm				J.O. No. : 40239

RESULTS**Chemical Analysis**

Sample ID: J.O.No. - 40239/5

By Spectrometer (ASTM E1507;1998)

<u>Element</u>	<u>%</u>
Carbon	0.077
Silicon	0.492
Sulphur	0.015
Phosphorus	0.027
Manganese	1.402
Nickel	10.04
Chromium	16.10
Molybdenum	2.172
Vanadium	0.049
Copper	0.365
Tungsten	0.045
Cobalt	0.106
Aluminium	<0.01
Titanium	<0.02
Iron	69.08

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.



Kesri Steels Limited

MATERIAL TEST CERTIFICATE

CC NO. -KSL-801/09-10 Heat No. B 0207	Date : 22.10.2009	Customer : M/S NOV SARA INDIA PVT LTD DEHRADUN
Specification:- SS 316	P.O. NO.: B / KES0215 / 09	Dtd.: 06.10.2009

SL. NO.	ITEM DESCRIPTION & DRAWING NO.	QUANTITY NOS
1	SS 316 DIA 45 MM	9

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	0.030	18.00	14.00	3.00			
	Actual Value	0.073	1.24	0.54	0.030	0.020	16.70	10.12	2.07			

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	IMPACT (Joules)
S PER EC.	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

The Steel has been made by Electric Furnace, and is fully killed / killing has been done by Al & Si it has fine grain structure.

Sign of the Inspecting Officer

Sign of the Chief of Quality Control