

**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 :**

PLOT NO. 263, SECTOR-24,  
FARIDABAD - 121 005 (INDIA)  
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FAX No. : +91-129-4065535  
E.mail : castings@bsltd.net

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

M/s. Sara Sae (P) Ltd.  
Issued to : 7/1, Pritam Road, Unit - II  
Dehra Dun - 248001  
Report No. 201175  
Ref. No. Nil  
Sample No. - 8011, Heat No. - D-2578, Dia - 56.0mm  
Sample Description. :  
D.O.T. : 21.09.2012  
D.O.R. : 21.09.2012  
J.O. No. : 62253

## **RESULTS**

**Chemical Analysis** (Fe Base - SS)  
Protocol : ASTM E 1086:2008 (By O.E.S)

Sample ID; J.O.No. - 62253/6

<u>Element</u>	<u>%</u>
Carbon	0.056
Silicon	0.527
Sulphur	0.010
Phosphorus	0.034
Manganese	1.152
Nickel	10.14
Chromium	16.68
Molybdenum	2.068
Copper	0.372
Tungsten	0.012
Cobalt	0.176
# Niobium	0.020
# Titanium	0.015

Checked By

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

- Note :**
- 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.
  - # Results found outside the range of NABL accredited scope.



MATERIAL TEST CERTIFICATE

TC NO-KSL-3822/12-13	Date : 07.09.2012	Customer : M/S SARA SEA INDUSTRIES
Heat No. D - 2578		DEHRADUN
Specification:- AISI 316	P.O. No.:	Invoice No:

SL. NO.	ITEM DESCRIPTION & DRAWING NO.	QUANTITY NOS
1	DIA 56 MM ROUND	98
	GRADE COLOUR CODE( PINK)	
	HEAT NO COLOUR CODE( GREEN)	

CHEMICAL COMPOSITION

PERCENT	C	Mn	Si	P	S	Cr	Ni	Mo	V	Ti	Cu	Al
AS PER SPEC. Min. (%)						16.00	10.00	2.00				
Max. (%)	0.08	2.00	1.00	0.045	0.030	18.00	14.00	3.00				
Actual Value	0.067	1.41	0.50	0.037	0.024	16.44	10.21	2.14				

HEAT TREATMENT

Condition	Temp. C	Soaking Time Hrs.	Cooling Medium

PHYSICAL PROPERTIES

MECHANICAL PROPERTIES	Y.S. N/mm2	U.T.S. N/mm2	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

The Steel has been made by Electric Furnace which is fully killed by Al & Si. It has fine grain structure.

Sign of the Inspecting Officer

Sign of the Chief of Quality Control

Registered Office:

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Delhi - 110088 (INDIA)

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Ingots | Rolled Bars | Square Bars | Forged Bars | Flat Bars | Castings