



SPAN FORGING PVT. LTD.

Manufacturers of : Steel Forging, CNC Turned Components & Gears

Works : Village - Tatarpur (Near Prithla) Teh. Palwal, Distt. Faridabad, Cell : 9810010535

Ref. No.....

Date.....

TEST REPORT

Issued to: M/s NOV-SARA India(P)Ltd.
A/2Sara Ind.Estate Ltd.Chak-
rata Road,Selaqui,Dehradun.

Report No.

988

D..O.T.

5/12/2011

D..O.R

3/12/2011

Sample Description

TEST SAMPLE

Sample No.

6982

Heat No.

R-618

RESULTS

Chemical Analysis
By Spectrometer

<u>Element</u>	<u>%</u>
Carbon	0.0645
Silicon	0.562
Sulphur	0.0049
Phosphorus	0.0222
Manganese	1.37
Nickel	10.27
Chromium	16.78
Molybdenum	2.11
Vanadium	0.0647
Copper	0.337
Niobium/Columbium	0.0097
Cobalt	0.167
Aluminium	0.0113
Titanium	0.0158
Iron	68.20

Checked By
Arun Mishra



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. The report can not be used as an evidence in a court of law.
4. Samples will be destroyed after 15 days.
5. Any Complaints about this report should be communicated with in 7 days of issue of this report.
6. This report shall not be reproduced except in full, without the written permission of the Laboratory.
7. *Not Covered under NABL Scope.



PARVATI P.LTD.

Regd Office & Showroom: 27, Rajasthani Udyog Nagar, G. T. Karnal Road,
NEW DELHI - 11, Phone: 91 - 11 - 47029900 Fax: 91 - 11 - 47029922

TEST CERTIFICATE

Customer Name & Destination :		T.C.NO :P-29	Date :9.11.11	ORDER NO : VERBAL		
M/S.NOV SARA INDIA P.LTD.DEHRADUN						
Material Specification	Manufacturing Route	Supply Condition	Size	PCS	Colour Code	Weight (KG)
AISI-316	INDUCTION FURNACE	AS ROLLED	56 MM	96	BLUE	5045 5080

CHEMICAL ANALYSIS IN PERCENTAGE

ELEMENTS		C	Mn	Si	S	P	Cr	Ni	Mo	N	CO OR	Size	Pcs.
Specification	Min.												
	Max.												
Heat No.	Grade												
R-617	AISI-316	.064	1.49	.49	.012	.030	16.60	10.06	2.05	.0536		56 MM	48
R-618	AISI-316	.066	1.53	.51	.014	.027	16.74	10.09	2.03	.0560		56 MM	48

ULTRASONIC TESTING
ACC. STD: 6mm FBH

REMARKS: NA

MECHANICAL PROPERTIES: TEST STD ASTM A370

SPEC	Test Condition	UTS (N/MM ²)	YS (N/MM ²)	% EL	% RA	Hardness (BHN)	
						Min.	Max.
SPCC							
RESIST							

METALLURGICAL TEST RESULT

INCLUSION RATING ASTM E - 45

	A	B	C	D
Thin	-	-	-	-
Thick	-	-	-	-

Grain Size
E 112

Test Temp:

Sr. No

IMPACT TESTING:

Test Std:

Impact Energy (J)

Average

TOWNEY HARDENABILITY: A5EVE - 5048

MACROSTREAK FLAW TEST

(25-40%)

DISC mm/Inch	0	1	2	3	4	5	Whitney Test (ASTM E - 381)	1 st Step	2 nd Step	3 rd Step
ACTUAL HRC										

Visual Inspection:

Remarks

1. Impact Testing as per DIN EN 10015 - 1
2. Ultrasonic testing as per ASTM A 388
3. Material is free from residual radioactive elements.
4. Lead not added during manufacturing.

WE CERTIFY THAT THE TEST
CERTIFICATE/FINDINGS ARE
CORRECT & RESULTS ARE
AS PER STANDARD /
CUSTOMER'S REQUIREMENTS

For Parvati Ltd.

For Parvati Ltd.

Chemist



Authorized Signatory (Q.C.)