



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.

987

D..O.T.

5/12/2011

D..O.R

3/12/2011

Sample Description

TEST SAMPLE

Sample No.

6981

Heat No.

R-617

RESULTS

Chemical Analysis
By Spectrometer

Element	%
Carbon	0.0657
Silicon	0.458
Sulphur	0.0067
Phosphorus	0.0232
Manganese	1.52
Nickel	10.23
Chromium	17.09
Molybdenum	2.2
Vanadium	0.0631
Copper	0.387
Niobium/Columbium	0.0081
Cobalt	0.184
Aluminium	0.0071
Titanium	0.0082
Iron	67.70

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 within 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.

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

TEST CERTIFICATE

Customer Name & Destination : M/S. NOV SARA INDIA P.LTD.DEHRADUN		T.C.NO.:P-29	Date :19.11.11	ORDER NO. : VERBAL		
Material Specification	Manufacturing Route			Supply Condition	Size	PCS
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	COLOUR	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

SPEE	Test Condition	UTS (N/MM ²)	YS (N/MM ²)	% EL	% RA	Hardness (BHN)	
						Min.	Max.
AS TESTED							

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

1				
2				
3				

JOINTS BY RADIOGRAPHIC : AS PER - 3848

DISC	1	2	3	4	5	6
mm/Inch						
ACTUAL						
HRC						

MACROBREAK FLAW TEST (40% - 400%)

Macro Break	1 st Step	2 nd Step	3 rd Step
(ASTM E - 381)			

Visual Inspection :

Remarks

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

For Parvati Ltd.

For Parvati Ltd.

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

Chemist



Authorized Signatory (Q.C.)