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.	D..O.T.
981	1/12/2011
	D..O.R
	30/11/2011

Sample Description	Sample No.	Heat No.	
TEST SAMPLE	6967	R-615	

RESULTS

Chemical Analysis
By Spectormetor

Element	%
Carbon	0.0576
Silicon	0.526
Sulphur	0.0034
Phosphorus	0.0189
Manganese	1.44
Nickel	10.21
Chromium	16.96
Molybdenum	2.11
Vanadium	0.0604
Copper	0.397
Niobium/Columbium	0.0161
Cobalt	0.226
Aluminium	0.0109
Titanium	0.0103
Iron	67.90

Checked By
Arun Mishra

Authorised Signatory
(Q.M / T.M)

1. The result lisited refer only to the tested samples and applicable parameters. Endorsement of product is neither inferred nor implied.
2. Total Liablity 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 & Works : 27,Rajasthani Udyog Nagar, G. T. Karnal Road,
NEW DELHI - 33, Phone : 91 - 11 - 47029900 Fax : 91 - 11 - 47029922

TEST CERTIFICATE

Customer Name & Destination :
M/S.NOV SARA INDIA P.LTD.

T.C.NO :P-28 Date :31.10.11

ORDER NO : VERBAL

Material Specification	Manufacturing Route	Supply Condition	Size	PCS	Colour Code	Weight (KG)
AISI-316	INDUCTION FURNACE	AS ROLLED	70 MM 40 MM	21 135	BLUE	3400 4295 2880 10575

CHEMICAL ANALYSIS IN PERCENTAGE

ELEMENTS		C	Mn	Si	S	P	Cr	Ni	Mo	N			Size	Pcs.
Specification	Min.													
	Max.													
Heat No.	Grade													
R-614	AISI-316	.066	1.54	.49	.014	.029	16.81	10.09	2.05	.0511			40 MM	80
R-615	AISI-316	.057	1.49	.55	.009	.031	16.69	10.14	2.03	.0490			40 MM	55
R-616	AISI-316	.060	1.53	.53	.011	.027	16.62	10.07	2.04	.0560			70 MM	21

ULTRASONIC TESTING
ACC. STD : 6mm FBH

REMARKS : NA

MECHANICAL PROPERTIES : TEST STD ASTM A370

	Test Condition	UTS (N/MM^2)	YS (N/MM^2)	% EL.	% RA	Hardness (BHN) Min.	Hardness (BHN) Max.
SPEC	-	-	-	-	-	-	-
RESULT	-	-	-	-	-	-	-

METALLURGICAL TEST RESULT

Grain Size E 112

INCLUHON RATING ASTM E - 45

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

IMPACT TESTING :

Test Temp : Test Std :

Sr. No	Impact Energy (J)	Average
1	-	
2	-	
3	-	

JOMINY HARDENABILITY : ASTM - 3848

DIST mm/Inch	J	J	J	J	J	J
ACTUAL HRC						

Macro Test (ASTM E - 381)

MACROSTREAK FLAW TEST (IS - 4075)

1st Step	2nd Step	3rd Step

Visual Inspection :

Remarks
1. Impact Testing as per DINEN 10015 - 1
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.

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

For Parvati Ltd.

PARVATI PVT. LIMITED DELHI

Chemist

Authorized Signatory (Q.C.)

4295
2880
7175