



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.

971

D.O.T.

19/11/11

D.O.R

17/11/11

Sample Description

Test Sample

Sample No.

6867

Heat No.

R-601

RESULTS

Chemical Analysis
By Spectrometer

Element	%
Carbon	0.0617
Silicon	0.481
Sulphur	0.0076
Phosphorus	0.0294
Manganese	1.42
Nickel	10.31
Chromium	16.57
Molybdenum	2.16
Vanadium	0.0686
Copper	0.413
Niobium/Columbium	0.0139
Cobalt	0.186
Aluminium	0.0106
Titanium	0.0099
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 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 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-22	Date :25.9.2011	ORDER NO : VERBAL		
Material Specification	Manufacturing Route	Supply Condition	Size	PCS	Colour Code	Weight (KG)
AISI-316	INDUCTION FURNACE	AS ROLLED	40 MM	99	BLUE	5235
				89		4785

CHEMICAL ANALYSIS IN PERCENTAGE

ELEMENTS	C	Mn	Si	S	P	Cr	Ni	Mo	N	NB	Size	Pcs.
Specification	Min.											
	Max.											
Heat No.	Grade											
R-601	AISI-316	.066	1.54	.52	.016	.033	16.54	10.08	2.05	.0560	40 MM	99
R-602	AISI-316	.062	1.48	.48	.015	.034	16.60	10.10	2.04	.0582	40 MM	89

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.	Max.
SPEC	-	-	-	-	-	-
RESULT	-	-	-	-	-	-

METALLURGICAL TEST RESULT

INCLUSION RATING ASTM E - 45

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

Grain Size
E 112

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	Macro Test (ASTM E - 381)	1 st Step	2 nd Step	3 rd Step
ACTUAL HRC										

MACROSTREAK FLAW TEST (IS - 4075)

Visual Inspection :

Remarks

- Impact Testing as per DINEN 10015 - 1
- Ultrasonic testing as per ASTM A 388
- Material is free from residual radioactive elements.
- 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

Chemist

[Signature]



Authorized Signatory (Q.C.)