



# 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 Pvt Ltd. 7/1, Pritam Road, Unit-II Dehradun-248001	Report No. <b>184</b>	D..O.T. <b>4/23/2011</b>
		D..O.R <b>4/21/2011</b>
Sample Description <b>TEST SAMPLE</b>	Sample No. <b>5971</b>	Heat No. <b>P-57</b>

## RESULTS

Chemical Analysis  
By Spectormeter

Sample ID

J.O No.

<u>Element</u>	<u>%</u>
Carbon	0.0687
Silicon	0.515
Sulphur	0.0207
Phosphorus	0.0086
Manganese	1.45
Nickel	10.13
Chromium	16.74
Molybdenum	2.09
Vanadium	0.0632
Copper	0.406
Tungsten	
Cobalt	0.201
Aluminium	0.0108
Titanium	0.0181
Iron	68.20

Checked By  
Arun Mishra



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 LTD.

Regd Office & Works : 27, Rajasthani Udyog Nagar, G. T. Karnal Road,  
NEW DELHI - 33, Phone : 91 - 11 - 27691481, 1282, 1283 Fax : 91 - 11 - 27691909

## TEST CERTIFICATE

Customer Name & Destination : <b>M/S NOV SARA INDIA(P)LTD.</b>		T.C.NO.:P-854	Date :14.03.11	ORDER NO : VERBAL		
Material Specification	Manufacturing Route	Supply Condition	Size	PCS	Colour Code	Weight (Mt)
AISI-316	INDUCTION FURNACE	AS CAST	4X5X44	27	BLUE+YELLOW+PINK	2850
			4X5X44	35	BLUE+PINK	3715
AISI-304			4X5X44	51	PINK	5430

### CHEMICAL ANALYSIS IN PERCENTAGE

ELEMENTS	C	Mn	Si	S	P	Cr	Ni	Mo	N	COLO UR	CODE	Size	Pcs.
Specification	Min.												
	Max.												
Heat No.	Grade												
P-56	AISI-316	.060	1.51	.51	.014	.032	16.59	10.05	2.02	.0662		4X5X44	27
P-57	AISI-316	.064	1.44	.47	.013	.030	16.71	10.07	2.04	.0637		4X5X44	35
P-62	AISI-304	.070	1.54	.51	.016	.032	18.06	8.05		.0681		4X5X44	51

ULTRASONIC TESTING  
ACC. STD : 6mm FBH

REMARKS : NA

### MECHANICAL PROPERTIES : TEST STD ASTM A370

	Test Condition	UTS (N/MM <sup>2</sup> )	YS (N/MM <sup>2</sup> )	% 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	Marco Test (ASTM E - 381)	1 <sup>st</sup> Step	2 <sup>nd</sup> Step	3 <sup>rd</sup> Step
ACTUAL HRC										

### MACROSTREAK FLAW TEST (IS - 4075)

### 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 manufacturin.
- 5 Steel has been manufactured in mercury free environment.

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.)