



SPAN FORGING PVT. LTD.

Manufacturers of : Steel Forging, CNC Turned Components & Gears

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

TEST REPORT

Ref. No

Date.....

Issued to: M/sNov Sara India Pvt.Ltd.
A/2Sara Industrial Estate Ltd.
Chakrata Road, Rampur -
Selaqui Dehradun-248001

Report No.

819

D..O.T.

24/8/2011

D..O.R

23/8/2011

Sample Description

TEST SAMPLE

Sample No.

6591

Heat No.

R-593

RESULTS

Chemical Analysis
By Spectormeter

Sample ID

J.O No.

<u>Element</u>	<u>%</u>
Carbon	0.0668
Silicon	0.558
Sulphur	0.012
Phosphorus	0.0278
Manganese	1.45
Nickel	10.19
Chromium	17.17
Molybdenum	2.09
Vanadium	0.053
Copper	0.333
Tungsten	0
Cobalt	0.182
Aluminium	0.0073
Titanium	0.0091
Iron	67.80

Checked By
Arun Mishra



Autorised 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 PRIVATE LTD.

Regd Office & Works : 27, Rajasthani Udyog Nagar, G. T. Karnal Road,
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-13		Date : 09.08.11		ORDER NO : VERBAL						
Material Specification		Manufacturing Route		Supply Condition		Size		PCS		Colour Code		Weight (Kg)		
AISI-316		INDUCTION FURNACE		AS CAST		4X5X44		122		Blue+Pink Blue+Brown Blue+White+Red		13475		
CHEMICAL ANALYSIS IN PERCENTAGE														
ELEMENTS		C	Mn	Si	S	P	Cr	Ni	Mo	N	COLOR	Size	Pcs.	
Specification	Min.													
	Max.													
Heat No.		Grade												
R-591		AISI-316	.061	1.42	.55	.016	.033	16.80	10.07	2.03	.0590	Blue+Pink	4X5X44	50
R-592		AISI-316	.068	1.54	.56	.014	.034	16.94	10.12	2.02	.0660	Blue+Brown	4X5X44	50
R-593		AISI-316	.060	1.41	.51	.016	.032	16.70	10.06	2.05	.0594	Blue+White+Red	4X5X44	22
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						Grain Size E 112		IMPACT TESTING :						
INCLUSION RATING ASTM E - 45								Test Temp :		Test Std :				
		A	B	C	D			Sr. No		Impact Energy (J)		Average		
Thin		-	-	-	-			1		-				
Thick		-	-	-	-			2		-				
		-	-	-	-			3		-				
JOMINY HARDENABILITY : ASTM - 3848								MACROSTREAK FLAW TEST (IS - 4075)						
DIST mm/Inch		J	J	J	J	J	J	Marco Test (						