



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.	Report No.	Date
Issued to: M/sNov Sara India Pvt.Ltd. A/2Sara Industrial Estate Ltd. Chakrata Road, Rampur - Selaqui Dehradun-248001	823	D..O.T. 28/8/2011
Sample Description DIA 56 MM	Sample No. 6614	D..O.R. 28/8/2011
		Heat No. R-595

RESULTS

Chemical Analysis
By Spectrometer

Sample ID

J.O No.

Element	%
Carbon	0.0727
Silicon	0.464
Sulphur	0.0201
Phosphorus	0.0357
Manganese	1.56
Nickel	10.23
Chromium	16.78
Molybdenum	2.11
Vanadium	0.0666
Copper	0.385
Tungsten	0
Cobalt	0.199
Aluminium	0.0087
Titanium	0.0072
Iron	68.00

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 Udaog 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-15	Date : 20.08.11	ORDER NO : VERBAL		
Material Specification	Manufacturing Route	Supply Condition	Size	PCS	Colour Code	Weight (Kg)
AISI-316	INDUCTION FURNACE	AS ROLLED	56 MM	126	Blue	

CHEMICAL ANALYSIS IN PERCENTAGE

CHEMICAL ANALYSIS - INTERFERENCE													Size	Pes.
ELEMENTS		C	Mn	Si	S	P	Cr	Ni	Mo	N	COLOR			
Specification	Min.													
	Max.													
Heat No.	Grade													
R-595	AISI-316	.064	1.52	.50	.017	.034	16.90	10.14	2.05	.0594	Blue	56MM	44	
R-596	AISI-316	.058	1.48	.48	.021	.036	16.61	10.70	2.05	.0610	Blue	56MM	50	
R-597	AISI-316	.067	1.56	.52	.015	.032	16.54	10.11	2.03	.0622	Blue	56MM	32	

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	Grain Size E 112	Test Temp : Sr. No	Test Std : Impact Energy (J)	Average
Thin	-	-	-	-		1	-	
Thick	-	-	-	-		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										

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.

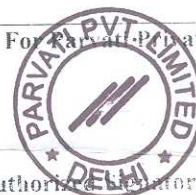
For Parvati Private Ltd.

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

Chemist

[Signature]

For Parvati Private Ltd.



Authorized Signatory (Q.C.)