



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	827	D..O.T. 30/8/2011
		D..O.R 29/8/2011
Sample Description INGOT 4"X5"	Sample No. 6622	Heat No. P-40

RESULTS

Chemical Analysis
By Spectrometer

Sample ID

J.O No.

Element	%
Carbon	0.0634
Silicon	0.507
Sulphur	0.009
Phosphorus	0.0289
Manganese	1.39
Nickel	10.25
Chromium	16.84
Molybdenum	2.06
Vanadium	0.0673
Copper	0.371
Tungsten	0
Cobalt	0.18
Aluminium	0.008
Titanium	0.0049
Iron	68.10

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 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-16	Date : 24.08.11	ORDER NO : VERBAL		
Material Specification	Manufacturing Route	Supply Condition	Size	PCS	Colour Code	Weight (Kg)	
AISI-316	INDUCTION FURNACE	AS CAST	4X5X44	40	Blue	4405	
AISI-304				51	Pink	5575	

CHEMICAL ANALYSIS IN PERCENTAGE

ELEMENTS	C	Mn	Si	S	P	Cr	Ni	Mo	N	COLOR	Size	Pcs.
Specification	Min.											
	Max.											
Heat No.	Grade											
P-40	AISI-316	.060	1.50	.52	.017	.030	16.75	10.04	2.02	.0516	Blue	4X5X44
P-45	AISI-304	.062	1.46	.48	.016	.031	18.06	8.05	-	.0610	Pink	4X5X44
												51

ULTRASONIC TESTING
ACC. STD : 6mm FBH

REMARKS : NA

MECHANICAL PROPERTIES : TEST STD ASTM A370

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

METALLURGICAL TEST RESULT

Grain Size
E 112

IMPACT TESTING :
Test Temp : Test Std :

INCLUSION RATING ASTM E - 45

Sr. No Impact Energy (J) Average

	A	B	C	D		1	-	
Thin	-	-	-	-		2	-	
Thick	-	-	-	-		3	-	

JOMINY HARDENABILITY : ASTM - 3848

MACROSTREAK FLAW TEST (IS - 4075)

DIST mm/Inch	J	J	J	J	J	Marco 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.

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

Chemist



Authorized Signatory (Q.C.)