



SPAN FORGING PVT. LTD.

Mfrs. of : Steel Forgings, CNC Turned Components, Centrifugal Casting of alloy steel

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Works : Village Tatarpur (Near Prithla) Teh. & Distt. Palwal

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TEST REPORT

Ref. No.

Date.....

Issued to: M/s.SARA SAE(P)Ltd.Unit-II
A/2Sara Ind.Estate Ltd.Chak-
rata Road,Selaqui,Dehradun.

Report No.

1227

D..O.T.

5/3/2012

D..O.R

6/3/2012

Sample Description

INGOT 4"X5"

Sample No.

7371

Heat No.

P-9

RESULTS

Chemical Analysis
By Spectrometer

Element

%

Carbon	0.0657
Silicon	0.557
Sulphur	0.0059
Phosphorus	0.0193
Manganese	1.45
Nickel	10.32
Chromium	16.44
Molybdenum	2.1
Vanadium	0.0743
Copper	0.302
Niobium/Columbium	0.0255
Cobalt	0.161
Aluminium	0.0164
Titanium	0.0188
Iron	68.40

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 - 27691481, 1282, 1283 Fax : 91 - 11 - 27691909

TEST CERTIFICATE

Customer Name & Destination : M/S NOV SARA INDIA(P)LTD.		T.C.NO.:P-851	Date :09.03.11	ORDER NO : VERBAL		
Material Specification	Manufacturing Route	Supply Condition	Size	PCS	Colour Code	Weight (Mt)
AISI-316	INDUCTION FURNACE	AS CAST	4X5X44	92	BLUE+WHITE(P-10) BLUE+YELLOW(P-11)	4480 4885

CHEMICAL ANALYSIS IN PERCENTAGE

ELEMENTS	C	Mn	Si	S	P	Cr	Ni	Mo	N	NB		Size	Pcs.
Specification	Min.												
	Max.												
Heat No.	Grade												
P-09	AISI-316	.058	1.46	.50	.017	.034	16.50	10.04	2.04	.0641		4X5X44	46
P-10	AISI-316	.064	1.40	.48	.019	.031	16.60	10.06	2.05	.0650		4X5X44	46

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	Marco Test (ASTM E - 381)	1 st Step	2 nd Step	3 rd 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.

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

For Parvati Ltd.

For Parvati Ltd.



Authorized Signatory (Q.C.)