



# SPAN FORGING PVT. LTD.

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

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

E-mail : spanforging@rediffmail.com

## 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.

1233

D..O.T.

15/3/2012

D..O.R

15/3/2012

Sample Description

DIA-56

Sample No.

7412

Heat No.

R-667

## RESULTS

Chemical Analysis  
By Spectrometer

<u>Element</u>	<u>%</u>
Carbon	0.0532
Silicon	0.549
Sulphur	0.0088
Phosphorus	0.0212
Manganese	1.47
Nickel	10.22
Chromium	17.1
Molybdenum	2.14
Vanadium	0.0604
Copper	0.364
Niobium/Columbium	0.0078
Cobalt	0.188
Aluminium	0.0123
Titanium	0.0158
Iron	67.70

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 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 P.LTD.

Regd Office & Works : 27, Rajasthani Udyog Nagar, G. T. Karnal Road,  
NEW DELHI - 33, Phone : 91 - 11 - 47029900 Fax : 91 - 11 - 47029922

## TEST CERTIFICATE

Customer Name & Destination : M/S. SARA SAE PVT. LTD.		T.C.NO : P-70	Date : 2.3.12	ORDER NO : VERBAL		
Material Specification	Manufacturing Route	Supply Condition	Size	PCS	Color Code	Weight (Kg)
AISI-316	INDUCTION FURNACE	AS ROLLED	56 MM	50 47	BLUE	5315 4965

### CHEMICAL ANALYSIS IN PERCENTAGE

ELEMENTS	C	Mn	Si	S	P	Cr	Ni	Mo	N	COLOR	Size	Pcs.
Specification	Min.											
	Max.											
Heat No.	Grade											
R-666	AISI-316	.056	1.57	.53	.016	.031	16.77	10.06	2.06	.0645	56 MM	50
R-667	AISI-316	.060	1.49	.57	.016	.032	16.73	10.02	2.05	.0674	56 MM	47

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 (BHIN)	
						Min.	Max.
SPEC	-	-	-	-	-	-	-
RESULT	-	-	-	-	-	-	-

### METALLURGICAL TEST RESULT

Grain Size  
E 112

### IMPACT TESTING :

INCLUSION RATING ASTM E - 45				Test Temp :	Test Std :	Impact Energy (J)	Average
A	B	C	D	Sr. No			
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 (ASTM E - 381)	1 <sup>st</sup> Step	2 <sup>nd</sup> Step	3 <sup>rd</sup> Step
ACTUAL HRC										

### Visual Inspection :

Remarks

- Impact Testing as per DINEN 10015 - 1
- Ultrasonic testing as per ASTM A 388
- Material is free from residual radioactive elements.
- Lead not added during manufacturing.

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

For Parvati P. Ltd.

Chemist



For Parvati P. Ltd.

Authorized Signatory (Q.C.)