



SPAN FORGING PVT. LTD.

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

Mobile : 9999986702

9999986704

9810010535

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.

1172

D.O.T.

20/1/2012

D.O.R

20/1/2012

Sample Description

Sample No.

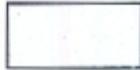
7220

Heat No.

R-644

RESULTS

Chemical Analysis
By Spectrometer



<u>Element</u>	<u>%</u>
Carbon	0.0667
Silicon	0.573
Sulphur	0.0134
Phosphorus	0.0274
Manganese	1.46
Nickel	10.1
Chromium	16.49
Molybdenum	2.22
Vanadium	0.0677
Copper	0.355
Niobium/Columbium	0.024
Cobalt	0.198
Aluminium	0.0156
Titanium	0.0134
Iron	68.30

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 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-52	Date :14.1.12	ORDER NO : VERBAL			
Material Specification		Manufacturing Route		Supply Condition	Size	PCS	Color Code	Weight (Kg)	
AISI-316		INDUCTION FURNACE		AS ROLLED	56 MM	50 40	BLUE	5180 4170	

CHEMICAL ANALYSIS IN PERCENTAGE

ELEMENTS		C	Mn	Si	S	P	Cr	Ni	Mo	N	COLOR	Size	Pcs.
Specification	Min.												
	Max.												
Heat No.	Grade												
R-644	AISI-316	.062	1.48	.56	.015	.033	16.58	10.13	2.08	.0676	Blue	56 MM	50
R-645	AISI-316	.054	1.56	.52	.017	.032	16.58	10.06	2.01	.0646	Blue	56 MM	40

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.	Min.	Max.			Min.	Max.
SPEC	-	-	-	-	-	-	-	-	-
RESULT	-	-	-	-	-	-	-	-	-

METALLURGICAL TEST RESULT

INCLUSION RATING ASTM E - 45				Grain Size E 112	IMPACT TESTING :			Sr. No	Impact Energy (J)	Average
A	B	C	D		Test Temp :	Test Std :	Sr. No	Impact Energy (J)	Average	
Thin	-	-	-	-	1	-	-	-	-	
Thick	-	-	-	-	2	-	-	-	-	

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										

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.

For Parvati P. Ltd.

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

Chemist

Parvati P. Ltd.
PARVATI P. LTD.
AUTHORIZED SIGNATORY (Q.C.)
DELHI