



# SPAN FORGING PVT. LTD.

Manufacturers of : Steel Forging, CNC Turned Components & Gears

Works : Village - Tatarpur (Near Prithila) Teh. Palwal, Distt. Faridabad, Cell : 9810010535

Ref. No. ....

Date.....

## TEST REPORT

Issued to: M/s NOV-SARA India(P)Ltd. A/2Sara Ind.Estate Ltd.Chak- rata Road,Selaqui,Dehradun.	Report No. 1024	D.O.T. 10/12/2011
Sample Description TEST SAMPLE	Sample No. 7015-A	D.O.R 8/12/2011
		Heat No. S-478-A

## RESULTS

Chemical Analysis  
By Spectrometer



Element	%
Carbon	0.0971
Silicon	0.116
Sulphur	0.0291
Phosphorus	0.033
Manganese	0.469
Nickel	0.054
Chromium	0.084
Molybdenum	0.017
Vanadium	0.00097
Copper	0.0587
Niobium/Columbium	0.001
Cobalt	0.0023
Aluminium	0.0722
Titanium	0.001
Iron	98.90

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.

**SHARU STEELS (P) LTD.**B-48 & D-251, Phase-VII, Focal Point, LUDHIANA - 141 010.  
E-mail : info@sharusteels.com & sharusteels@connect2.dsl.netQUALITY ASSURANCE DEPARTMENT  
METALLURGICAL TEST REPORT

F-QCD-03

**TEST CERTIFICATE**

M/S. SARH ONE PRIVATE LIMITED DIVISION-II A-2 SARH INDUSTRIAL ESTATE LTD. CHAKRATA ROAD, SELAQUI RAMPUR DEHRADUN (UTTRAKHAND)	T.C. No. 1456	Date 01-12-2010
	Invoice No. 251	
	Truck No. PB-19E 9097	

GRADE	SIZE	HEAT NO.	MANUFACTURING ROUTE	COLOUR CODE	SUPPLY CONDN.	QNTY. M.T.	NO. OF PCS.
ASTI 1600	56 MM	S 478	L/HIT	SADHII	AS ROLLED	77.02	LOOSE

CHEMICAL COMPOSITION IN PERCENTAGE															
	C	Mn	S	P	Si	Ni	Cr	Mo	V	Al	Cu	Sn	Ti	B	Ca
Min.															
Max.															
Actual	0.18	0.56	0.035	0.034	0.22				0.02						

METALLURGICAL RESULTS											
INCLUSION RATING IS : 4163/JK CHART/ASTM E-112A								Aust. Grain Size ASTM No. (E-112)	4	Gas content (ppm)	
STD MAX	A		B		C		D		Decarb. (MM)	Micro-Structure	O2
	T	H	T	H	T	H	T	H			
											N2
ACTUAL	1.5	1.8	1.6	1.6	1.5						H2

MECHANICAL PROPERTIES							MACRO	ULTRASONIC TEST	MIX UP TEST
	U.T.S.	Y.S.	EL %	RA %	Impact Value	Hardness B.H.N. / R.B.			
Reqd.							OK	OK	OK
Actual									

HARDENABILITY (HRC) AS PER IS : 3648									
Distance									
Reqd.									
Actual									

Remarks :

CERTIFIED THAT THE TEST FINDINGS ARE CORRECT & ARE BASED ON ACTUAL RESULTS CARRIED OUT ON SAMPLES DRAWN AS PER Q.A.P.

PREPARED BY

APPROVED BY