



SPAN FORGING PVT. LTD.

Manufacturers of : Steel Forging, CNC Turned Components & Gears

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

Ref. No.....

Date.....

TEST REPORT

Issued to: M/s Nov Sara India Pvt Ltd. 7/1, Pritam Road, Unit-II Dehradun-248001	Report No.	D.O.T.
	183	4/23/2011
Sample Description TEST SAMPLE	Sample No.	D.O.R
	5959	4/19/2011
	Heat No.	P-10

RESULTS

Chemical Analysis
By Spectrometer

Sample ID

J.O No.

Element	%
Carbon	0.0695
Silicon	0.509
Sulphur	0.0094
Phosphorus	0.0037
Manganese	1.44
Nickel	10.54
Chromium	16.56
Molybdenum	2.2
Vanadium	0.0719
Copper	0.367
Tungsten	
Cobalt	0.196
Aluminium	0.0074
Titanium	0.0181
Iron	67.90

Checked By
Arun Mishra



Authorised Signatory





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	
Specification	Min.											Pcs.	
	Max.												
Heat No.		Grade											
P-10		AISI-316	.058	1.46	.50	.017	.034	16.50	10.04	2.04	.0641	4X5X44	46
P-11		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						Grain Size E 112		IMPACT TESTING :					
INCLUSION RATING ASTM E - 45								Test Temp :		Test Std :			
		A	B	C	D			Sr. No	Impact Energy (J)		Average		
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 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 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.				
						 Chemist			 Authorized Signatory (Q.C.)				