



SPAN FORGING PVT. LTD.

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

Mobile : 9999986702

9999986704

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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 X-CELL India
Subhadra Estate, Sec-58
Samaipur Road, Ballabgarh

Report No.
845

D.O.T.

27/9/2011

D.O.R

Sample Description
DIA 40MM

Sample No.
6701

Heat No.

PART NAME

C33M-3

RESULTS

Chemical Analysis
By Spectrometer

Sample ID

J.O No.

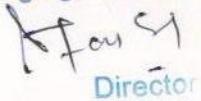
<u>Element</u>	<u>%</u>
Carbon	0.0176
Silicon	0.129
Sulphur	0.0019
Phosphorus	0.0145
Manganese	0.373
Nickel	43.99
Chromium	22.25
Molybdenum	3.49
Vanadium	0.0356
Copper	1.69
Tungsten	0
Cobalt	0.256
Aluminium	0.133
Titanium	1.16
Iron	26.27

Checked By

Autorised Signatory

(Q.M / T.M)

For Span Forging Pvt. Ltd.


Director

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.

Customer

Consignee

Customer order number

Allvac Order number

2175

252192-0003

Specification

Process

ASTM B425 2010 UNS N0.8825
 ASTM B564 2010 UNS N0.8825
 NACE MR0175*2003

Vacuum Induction Melted /
 Electroslag Remelted.

CERTIFICATE OF CONFORMITY

Description of material supplied:

40mm Diameter. Tolerance: K12

Length: 4360mm

Weight: 705 kg

Annealed, Peeled.

Cast no	C	Si	Mn	P	S	Cr	Mo	Ni	Al	B	Co	Cu	Nb	V	W	Ti	Zr	Ca	Mg	Se	Ta	Fe	Nb+Ta	
C33M-3	.012	.30	.48	.002	.0001	22.17	3.09	38.14	.10			1.73												
AC2666	Top																							
T-transverse	Tensile Size	R _{p0.2%}	Rm	A	Z	Impact M/R	Hardness Test piece On Bars	HBW10/3000	HB10/3000			Notch tensile	Creep / rupture tests Stress	Time										
L-longitudinal	inch	Ksi	Ksi	4D%	%	Charpy 2Mv	M/R																	
L(1)	.500 mm	45 Mpa	93 Mpa	54 5D%	71	170																		
L(2)	10	312	638	52	72	170																		

Hot Working Method : Rolled, Annealed, Pealed
 Heat Treatment Chart/Ultrasonic Report - Attached.
 MECH TEST PERFORMED FROM BAR PROLONGATION

Heat Treatment on Bars:
 Anneal 980°C for 1H / Water Quenched.
 (Contact Thermocouple)
 Heat Treatment Batch Number: 252192/0003

Furnace Calibration per API6A Annex P

Metallographic:
 Macro Etch/Canada Etch
 Satisfactory to ASTM A604 Class 1 – 4 = A at top & bottom positions.
 Grain Size: E = ASTM 5.0, MR = ASTM 6.5, C = ASTM 6.0

Non Destructive Tests:
 Ultrasonic: Satisfactory
 The material has been furnished in accordance with the requirement.
 Antimixing testing performed : OK

Certified that, unless stated above, the whole of the above-mentioned materials have been manufactured, tested and inspected in accordance with the terms of the contract/order applicable thereto and conform fully
 To the standards/specifications quoted hereon. The quality control arrangements adopted in respect of these supplies have accorded with the following conditions:-