



SPAN FORGING PVT. LTD.

Manufacturers of : Steel Forging, CNC Turned Components & Gears

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

TEST REPORT

| | | |
|--|----------------------|---|
| Ref. No. | Report No. | Date |
| Issued to: M/s Nov Sara India Pvt. Ltd. A/2 Sara Industrial Estate Ltd. Chakrata Road, Rampur - Selaqui Dehradun-248001 | 726 | D.O.T. 11/8/2011 D.O.R 10/8/2011 |
| Sample Description AISI-1008 | Sample No. 6556-A | Heat No. S-191-A |

RESULTS

Chemical Analysis
By Spectrometer

Sample ID

J.O No.

| Element | % |
|------------|--------|
| Carbon | 0.0798 |
| Silicon | 0.251 |
| Sulphur | 0.0403 |
| Phosphorus | 0.0325 |
| Manganese | 0.449 |
| Nickel | 0.0412 |
| Chromium | 0.13 |
| Molybdenum | 0.0097 |
| Vanadium | 0.0026 |
| Copper | 0.0501 |
| Tungsten | 0 |
| Cobalt | 0.0057 |
| Aluminium | 0.0171 |
| Titanium | 0.0015 |
| Iron | 98.80 |

Checked By
Arun Mishra



Autorised 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.



SHARU STEELS (P) LTD.

B-48 & D-251, Phase-VII, Focal Point, LUDHIANA - 141 010.
E-mail : info@sharusteels.com & sharusteels@connect2.dsl.net

QUALITY ASSURANCE DEPARTMENT
METALLURGICAL TEST REPORT

TEST CERTIFICATE

F-QCD-03



| | | | | | |
|---|--|-----------------------|--|-----------------|--|
| M/S. SARA OIL PRIVATE LIMITED DIVISION II A 2 SARA INDUSTRIAL ESTATE LTD. CHAKRATA ROAD, DELAUNT RANPUR DEHRADUN (UTTARAKHAND) | | T.C. No. 0246 | | Date 18.01.2012 | |
| Invoice No. 2313 | | Truck No. HR-37C-5597 | | | |

| GRADE | SIZE | HEAT NO. | MANUFACTURING ROUTE | COLOUR CODE | SUPPLY COND. | QNTY. M.T. | NO. OF PCS. |
|-----------|-------|----------|---------------------|-------------|--------------|------------|-------------|
| AISI 1040 | 45 MM | C 171 | L/HT | YELLOW | AS ROLLED | 7510 | 100000 |

| CHEMICAL COMPOSITION IN PERCENTAGE | | | | | | | | | | | | | | | |
|------------------------------------|------|------|-------|-------|------|----|----|----|---|-------|----|----|----|---|----|
| | C | Mn | S | P | Si | Ni | Cr | Mo | V | Al | Cu | Sn | Ti | B | Ca |
| Min. | | | | | | | | | | | | | | | |
| Max. | | | | | | | | | | | | | | | |
| Actual | 0.67 | 0.35 | 0.004 | 0.005 | 0.15 | | | | | 0.020 | | | | | |

| METALLURGICAL RESULTS | | | | | | | | | | |
|--|-----|---|-----|---|-----|---|-----|---|-----------------------------------|-------------------|
| INCLUSION RATING IS : 4163/JK CHART/ASTM E-45A | | | | | | | | | | |
| | A | | B | | C | | D | | Aust. Grain Size ASTM No. (E-112) | Gas content (ppm) |
| | T | H | T | H | T | H | T | H | | |
| STD MAX | | | | | | | | | Decarb. (MM) | O ₂ |
| ACTUAL | 1.5 | | 1.0 | | 1.0 | | 1.5 | | Micro-Structure | N ₂ |
| | | | | | | | | | | H ₂ |

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

| HARDENABILITY (HRC) AS PER IS : 3848 | | | | | | | | | |
|--------------------------------------|--|--|--|--|--|--|--|--|--|
| 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

AUTHORIZED SIGNATORY