



TECHNICAL REQUIREMENTS.

- HEAT TREAT. DIA. OF IND. 3.5-3.8 mm (BHN 255-302)
- DESCALE.
- DEPTH OF SURFACE DEFECTS AND SCALE PITS UPTO 0.5 OF ACTUAL MACHINING ALLOWANCE ARE ALLOWED.
- MISMATCH SHOULD NOT EXCEED 0.9 mm.
- RESIDUAL FIN ALONG PARTING LINE SHOULD NOT EXCEED 1.0 mm.
- FOLDING OF FIN IN PIERCED HOLE IS ALLOWED.
- BUCKLING SHOULD NOT EXCEED 0.8MM.
- MARK PART NO.
- UNSPECIFIED DRAFTS = 7°
- UNSPECIFIED RADII = R 3.0 mm.
- MACHINING DIMENSIONS ARE SHOWN IN BRACKETS.
- UNTOLERANCED DIMENSIONS ARE FOR CONSTRUCTION.
- ECCENTRICITY OF PIERCED HOLE SHOULD NOT EXCEED 1.5 mm.
- PAINT REDOXIDE
- PILOT SAMPLE SHOULD BE APPROVED BEFORE BULK SUPPLY.

VETTED
01 MAR 2006
JWM/STD-CELL

इन आरेखणों तथा इसके साथ की सम्पूर्ण सामग्री का स्वत्व अधिकार भारत सरकार रक्षा मंत्रालय की भारतीय आयुध निर्माणियों के पास है। भारतीय आयुध निर्माणियों के महानिदेशक की लिखित अनुमति के बिना इनकी नकल या किसी भी रूप में इनके उद्धरण या इनमें समाहित सूचना किसी अनधिकृत व्यक्ति को उपलब्ध नहीं कराई जानी चाहिए।
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मूलमाप व अन्वयोजन
NOMINAL SIZE & FIT

विचलन
DEVIATION

| CHEMICAL COMPOSITION (%) | | | MECHANICAL PROPERTIES | | |
|--------------------------|----------------------------|---------------------------------------|--------------------------|------------------------------|---------------------------------------|
| ELEMENT | STEEL 38XC GOST 4543-71 | STEEL 817M40 (EN-24) BS: 970-83 | DESCRIPTION | STEEL 38XC GOST 4543-71 | STEEL 817M40 (EN-24) BS: 970-83 |
| C | 0.34 - 0.42 | 0.36 - 0.44 | LIMITING RULING SECTION | ----- | 150 mm |
| Si | 1.00 - 1.40 | ----- | HEAT TREATMENT CONDITION | ----- | T |
| Mn | 0.30 - 0.60 | 0.45 - 0.70 | TENSILE STRENGTH | 95 Kgf/mm ² MIN. | 850-1000 MPa |
| Cr | 1.30 - 1.60 | 1.00 - 1.40 | YIELD STRENGTH | 75 Kgf/mm ² MIN. | 680 MPa MIN. |
| Ni | 0.30 MAX. | 1.30 - 1.70 | RELATIVE ELONGATION | 12 % MIN. | 13 % MIN. |
| Cu | 0.30 MAX. | 0.025 MAX. | RELATIVE COMPRESSION | ----- | ----- |
| Mo | ----- | 0.20 - 0.35 | REDUCTION OF AREA | 50 % MIN. | ----- |
| S | 0.035 MAX. | 0.040 MAX. | HARDNESS BHN | 255 - 302 | 255 - 302 |
| P | 0.035 MAX. | 0.035 MAX. | IMPACT STRENGTH | 7 Kgf.m/cm ² MIN. | ----- |
| | | | IZOD | ----- | 40 MIN. |
| | | | KCV (CHARPY) | ----- | 50 MIN. |
| | | | 0.2% PROOF STRESS | ----- | 665 MPa MIN. |

ALTERNATE MATERIAL :-
STEEL 817M40 (EN-24) TO BS: 970-83

AUTHORITY :-
CQA(HV) LETTER No.
O91/IFD/IND-V/MTPF/OE
DATED 17.03.2005

| संख्या NO OFF | विवरण DESCRIPTION | पुर्जा क. PART NO | पदार्थ MATERIAL | मानक STANDARD | परिमाण DIMENSIONS | अभ्यक्ति REMARKS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|----------------------|--------------------|------------------|--|---------------------------|-----|------|------|------|--------|------|---------|------|----------|------|-----------|------|------|-----|-------|------|--------|------|------|------|---|-----|---|------|----|-------|-----|-----------|------|--------|
| | DRIVING GEAR (FORGING Drg.) | | STEEL 38XC | GOST 4543-71 | | MASS - 1.45 Kg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>सामान्य सहिष्णुता GENERAL TOLERANCE</p> <p>रेखिक परिमाण LINEAR DIMENSION</p> <table border="1"> <tr><td>0-6</td><td>±0.1</td></tr> <tr><td>6-30</td><td>±0.2</td></tr> <tr><td>30-120</td><td>±0.3</td></tr> <tr><td>120-315</td><td>±0.5</td></tr> <tr><td>315-1000</td><td>±0.8</td></tr> <tr><td>1000-2000</td><td>±1.2</td></tr> </table> <p>कोणिक परिमाण ANGULAR DIMENSION</p> <table border="1"> <tr><td>1-10</td><td>±1°</td></tr> <tr><td>10-50</td><td>±30'</td></tr> <tr><td>50-100</td><td>±20'</td></tr> <tr><td>>100</td><td>±10'</td></tr> </table> <p>मापक 'म्यू एम' में VALUE IN 'μm'</p> <table border="1"> <tr><td>-</td><td>>25</td></tr> <tr><td>▽</td><td>8-25</td></tr> <tr><td>▽▽</td><td>1.6-8</td></tr> <tr><td>▽▽▽</td><td>0.025-1.6</td></tr> <tr><td>▽▽▽▽</td><td><0.025</td></tr> </table> | | | | | | | 0-6 | ±0.1 | 6-30 | ±0.2 | 30-120 | ±0.3 | 120-315 | ±0.5 | 315-1000 | ±0.8 | 1000-2000 | ±1.2 | 1-10 | ±1° | 10-50 | ±30' | 50-100 | ±20' | >100 | ±10' | - | >25 | ▽ | 8-25 | ▽▽ | 1.6-8 | ▽▽▽ | 0.025-1.6 | ▽▽▽▽ | <0.025 |
| 0-6 | ±0.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6-30 | ±0.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30-120 | ±0.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 120-315 | ±0.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 315-1000 | ±0.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1000-2000 | ±1.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1-10 | ±1° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10-50 | ±30' | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 50-100 | ±20' | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| >100 | ±10' | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| - | >25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▽ | 8-25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▽▽ | 1.6-8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▽▽▽ | 0.025-1.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▽▽▽▽ | <0.025 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | DRIVING GEAR (FORGING Drg.) FOR COMPONENT No. 172-45-178-1 TRANSMISSION GEAR UNIT (CODE 45 / T-72 & T90) | | | | | 2006 दिनांक DATE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | मापमान SCALE | नाम NAME | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | 1:1 | SELVI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | आरेखित DRAWN | 28.02.06 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | जाँच CHECKED | 1.3.06 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | अनुमोदित APPROVED | 1.3.06 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | द्वारा बदला REPLACED BY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | हेतु बदला REPLACED FOR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | कार्यालय OFFICE | आरेखण क्र. DRAWING NO. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | D.O | 172-45-178-1/F | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | मशीनी औजार आदिरूप फैक्टरी, अम्बरनाथ MACHINE TOOL PROTOTYPE FACTORY, AMBERNATH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |