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| QUALITY MONITORING INSTRUCTION FOR INSPECTION | | Issue No : 01 |
| | | Rev No : |
| | | Date of Issue 10/10/2023 |
| C-5073 (HANDLE) | | OFT/MI/30 mm/ C 5073. |
| Rev.No | Amendment | Date |
| | | |

MATERIAL SPECIFICATION : Steel 30XPA OCT-3-98.
 MATERIAL FOR INDIA : BS:970 Pr1 1983 Gde 817 M40 IN 'Z' CONDITION (OR) ✓
 : IS5517-93, DESIGN 40 Ni6 Cr4 Mo3 (LRS 30mm)


CONDITION OF SUPPLY : FULL FINISHED WITH FIRM'S MATERIAL.
 END USE : 30mm CANNON.


INSPECTION CHECK TO BE CARRIED OUT

Table 'A'


| SL NO | CHARACTERISTICS | SPECIFICATION / REQUIREMENT | SAMPLE SIZE |
|-------|--------------------------|--|---------------------|
| 1. | Visual | The Component shall be smooth and as free as possible from defects, such as grooves, seams, tears, rust, scale, scratches, pits, die-marks and any other harmful defects. | 100% |
| 2. | Dimension | 100% Dimension check as per drawing. | |
| 3. | Chemical Composition (%) | <p><u>STEEL 30XPA OCT 3-98-80 :-</u> <u>(As per Standard GOST 5160-70)</u> C = 0.28-0.33 Ni = 0.25-0.50 Si = 0.17-0.37 S = 0.025(Max) Mn = 0.50-0.80 P = 0.025(Max) Cr = 1.00-1.30 Cu = 0.20 (Max) B = 0.001-0.0045</p> <p><u>BS:970 Pr1 1983 Gde 817 M40</u> C = 0.36-0.44 Mn = 0.45-0.70 Cr = 1.00-1.40 Mo = 0.20-0.35 Ni = 1.30- 1.70 P = 0.025(Max) Si = 0.1-0.35 S = 0.025(Max)</p> <p><u>IS: 5517-1993, Design 40 Ni6 Cr4 Mo3</u> C = 0.35 – 0.45 Mn = 0.40 – 0.70 Si = 0.10 – 0.35 S = 0.035 (Max) Cr = 0.90 – 1.20 P = 0.035 (Max) Mo = 0.25 – 0.35 Ni = 1.25-1.75 Cu = 0.35 (Max) V = 0.05 (Max) B = 0.0003 (Max) Tin = 0.05 (Max) %Cu + 10times (%tin)= 0.60% (Max).</p> <p>(Permissible variations in value as per specification standard)</p> | One Sample Per Heat |

| | | | |
|----|-----------------------|---|-------------------------|
| 4. | Mechanical Properties | STEEL 30XPA OCT-3-98-80 Tensile Strength = 160 Kg/mm ² (Min) Yield Strength = 130 Kg/mm ² (Min) Elongation = 9% (Min) Reduction of area = 40% (Min) Impact = 5 Kgfm/cm ² (Min) | One sample Per Heat. |
| | | BS:970 Pr1 1983 Gde 817 M40 IN 'Z' CONDITION Tensile Strength 1550 N/mm ² (Min) 0.2% Proof Stress 1235 N/mm ² (Min) % Elongation 5% (Min) Izod Impact 8 ft.lb (Min) | |
| | | IS: 5517-1993, Design 40 Ni6 Cr4 Mo3 (LRS 30mm) Tensile Strength 1500 Mpa Min (As Per Drawing) 0.2% Proof Stress 1300 MPa (Min) % Elongation 6% (Min) Izod Impact 11 Joules (Min) | |
| | | | |
| 5. | Hardness | 43.5- 51.5 HRC (As per drawing) | |
| 6. | Protective Finish | Accelerated electroless Phosphating with chromate treatment. | 100% ✓ |
| 7. | Packing | The Packing of the Material shall be done in such a manner to avoid corrosion and damage in handling and transit. | 100% ✓ |
| 8. | Marking | Each Packing shall be legibly marked with manufacturer's identity , Qty, Heat No, OFT Supply order No etc., | Each Consignment |


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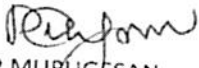

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Note:


1. The Raw material / component to be tested by the firm on selection of the sample by the firm itself for chemical composition and mechanical properties in NABL accredited approved Lab as per Table 'A'.
2. The Firm has to check for the dimensions, visual defects, packing and marking as per Table 'A'. After completion of tests as per Note-1 as above, the Firm has to submit the following documents to OFT.
 - I. The Raw material certificate from the original manufacturer, Heat number, and quantity purchased and number of bars is to be mentioned in the inspection letter to OFT.
 - II. The Chemical and Mechanical test certificates from NABL accredited approved lab as per Table 'A'.
 - III. Dimensional reports including visual as per Table 'A'.
 - IV. Guarantee / Warrantee certificate of supplier against the supply.
3. All the above Documents mentioned at Note No.2 above are to be forwarded to ED/OFT along with supply.
4. OFT shall verify all the documents as above and accord clearance to the firm for dispatch of the material to OFT if all documents are in order.
5. OFT/Trichy shall verify all the parameters as per Table 'A' and after satisfactory results, the material will be accepted /cleared accordingly.
6. Material has to be replaced 100% by the firm in case of non conformity to specification as per Table-A, during inspection at OFT, Trichy.


VERIFICATION OF INSPECTION DOCUMENTS

| SL_NO | INSPECTION DOCUMENTS |
|-------|---|
| 1 | The Raw material original Manufacturer's certificate, Details of Heat Number, Quantity purchased and number of Bars etc., |
| 2 | The Chemical and Mechanical test certificates from NABL accredited approved Lab. |
| 3 | Dimension report including visual. |
| 4 | Packing slip details. |


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