

QUALITY MONITORING INSTRUCTION FOR INSPECTION

Issue No : 01
Rev No :
Date of Issue
/ / 2021

A 2033 (HANDLE LOCK BARREL)

OFT/QMI/12.7 mm/A2033

| Rev.No | Amendment | Date |
|--------|-----------|------|
| | | |

MATERIAL SPECIFICATION : A- ПВ -0-2 GOST 19904-74/ 4-II-35 GOST 16523-70

ALTERNATE MATERIAL : A- ПВ -0-2 GOST 19904-74/ 4-II-40 GOST 16523-70

INDIGENOUS MATERIAL : IS: 7226:1974 DESIGN C40

CONDITION OF SUPPLY : FULLY FINISHED WITH FIRM'S MATERIAL.

END USE : 12.7mm AD GUN.

INSPECTION CHECK TO BE CARRIED OUT

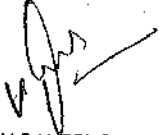
Table 'A'

| SL NO | CHARACTERISTICS | SPECIFICATION / REQUIREMENT | SAMPLE SIZE |
|-------|--------------------------|--|----------------------|
| 1. | Visual | (i) The Sheets shall be free from defects such as rust, Scale, burrs, Surface Rupture, Layer Separation, traces of shrinkage pipes, cavities, gas bubbles and any other harmful defects. (ii) The macrostructure of steel should not have any traces of shrinkage cavities, foreign inclusions, cracks, bubbles and flakes and this should be ensured by the manufacturing method. | 100% |
| 2. | Dimension | 100% dimension to check as per drawing | |
| 3. | Chemical Composition (%) | <p><u>A- ПВ -0-2 GOST 19904-74/ 4-II-35 GOST 16523-70</u> <u>(Refer GOST 1050-74)</u> C = 0.32-0.40 Cu = 0.25(Max) Mn = 0.50-0.80 S = 0.040(Max) Si = 0.17-0.37 P = 0.035(Max) Cr = 0.25(Max) Ni = 0.25(Max)</p> <p><u>A- ПВ -0-2 GOST 19904-74/ 4-II-40 GOST 16523-70</u> <u>(Refer GOST 1050-74)</u> C = 0.37-0.45 Cu = 0.25(Max) Mn = 0.50-0.80 S = 0.040(Max) Si = 0.17-0.37 P = 0.035(Max) Cr = 0.25(Max) Ni = 0.25(Max)</p> <p><u>IS:7226:1974 DESIGN C40</u> C = 0.35-0.45 S = 0.040 (Max) Mn = 0.60-0.90 P = 0.040 (Max) Si = 0.15-0.35</p> <p>(Permissible variations in value as per specification standard)</p> | One Sample Per Heat. |

| | | | |
|----|-----------------------|--|------------------------|
| 4. | Mechanical Properties | <u>A- ПВ -0-2 GOST 19904-74/ 4-II-35 GOST 16523-70</u> UTS 50-65 Kgf/mm ² Relative Elongation 18% (Min). | 2 Sheets from a Batch. |
| | | <u>A- ПВ -0-2 GOST 19904-74/ 4-II-40 GOST 16523-70</u> UTS 52-67 Kgf/mm ² Relative Elongation 17% (Min). | |
| | | <u>IS:7226:1974 DESIGN C40</u> Hardness 160 HV (Max) | |
| 5. | Other Test | (i) Depth of decarburized layer (based on pure ferrite) of sheets should not exceed 2.5% of actual thickness of sheet from each side. (ii) Bend test as per specification standard. | 2 Sheets from a Batch. |
| 6. | Hardness | 34-41 HRC (As per drawing). | Each Consignment |
| 7. | Protective Finish | Phosphate to specification JSS-0465-01, 1988, Class-II, Electroless Accelerated Oil finish. | |
| 8. | Packing | The Packing of the Material shall be done in such a manner to avoid corrosion and damage in handling and transit. | |
| 9. | Marking | Each Packing shall be legibly marked with manufacturer's identity, Qty, Heat No, OFT Supply order No etc., | |

U.MANGALASAMY
HOS/STD.CELL
CHECKED

L.S. ASHA
HOS / QCM
CHECKED


V.RAVEENDAR
JWM/STD.CELL
PREPARED

S. KRISHNA SWAMY
JT.GM (QC and R&D)

G.DEVENDIRANE
AWM (QCM)

A.K SINGH
AGM / (FINANCE & QC)
APPROVED