## QUALITY MONITORING INSTRUCTION FOR INSPECTION

Issue No : 01
Rev No:
Date of Issue
18 /08 /2021

TEND-2662 (BASE SIGHT GLASS) For 30P 4001

OFT/MI/MGL/30P 4001.

Rev.No Amendment Date

MATERIAL SPECIFICATION

AL 7075 with T6 Condition.

CONDITION OF SUPPLY

95% Finished with firm's material (Before HA coating)

**END USE** 

40mm MGL.

**INSPECTION CHECK TO BE CARRIED OUT** 

Table 'A'

SL NO	CHARACTERISTICS	SPECIFICATION / REQUIREMENT	SAMPLE SIZE
1.	Visual .	The blank shall be free from defects such as rust, scale, burrs and any other harmful defects.	100%
2.	Dimension	100% Dimension check as per drawing.	
3.	Chemical Composition (%)	AL 7075 with T6 Condition.         Cr       = 0.18-0.28       Si       = 0.40 (Max)         Cu       = 1.20-2.00       Ti       = 0.20 (Max)         Mg       = 2.10-2.90       Zr+Ti       = 0.25 (Max)         Zn       = 5.10-6.10       other Elements each = 0.05 (Max)         Fe       = 0.50 (Max)       Other Elements Total=0.15 (Max)         Mn       = 0.30 (Max)       Al       = Remainder	One Sample Per Heat
4.	Mechanical Properties	AL 7075 with T6 Condition.  Tensile Strength = 540 MPa (Min)  0.2% Proof Stress = 485 MPa (Min)  Elongation = 7% (Min)	One Sample Per Heat
5.	Other Tests	<ol> <li>Ultrasonic Test as per Specification Standard.</li> <li>Etching Test as per Specification Standard.</li> <li>Magnetic Particle Test as per Specification Standard.</li> </ol>	One Sample Per Heat
6.	Packing	The Packing of the Material shall be done in such a manner to avoid corrosion and damage in handling and transit.	Each Consignment
7.	Marking	Each Packing shall be legibly marked with manufacturer's identity, Qty, Heat No, OFT Supply order No etc.,	

U.MANGALASAM 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)

> A.K SINGH AGM / (WP & MAINT) APPROVED

G.DEVENDIRANE

## Note:

- 1. The Raw material/component/forging/casting 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.
  - 1. 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.
  - 11. The Chemical and Mechanical test certificates from NABL accredited approved lab as per Table 'A'.
  - Raw material sample minimum of 300mm should be supplied for cross verification along III. with the first supply of stores.
  - IV. Dimensional reports including visual as per Table 'A'.
  - ٧. Guarantee / Warrantee certificate of supr lier against the supply.
- 3. All the above Documents mentioned at Note No.2 above are to be forwarded to GM/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.	

HOS/STD.CELL

CHECKED

L.S. ASHA

HOS / QCM

CHECKED

JWM/STD.CELL

**PREPARED** 

AWM (QCN & HT)

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

AGM / (WP & MAINT) **APPROVED**