M/S. GIRISH CHANDRA GHOSH & G.G.S.

151 YEARS: 1874–2025 SESQUICENTENNIAL CELEBRATION

FORMERLY M/S GIRISH CHANDRA GHOSH (ESTD. 1874)

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MODEL APPROVED BY GOVERNMENT OF INDIA AND MANUFACTURING LICENCE FROM LEGAL METROLOGY DEPARTMENT GOVERNMENT OF WEST BENGAL.

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PROVING TANKS:

Proving tanks shall be provided with drain valves at the bottom part; they should be designed with a top neck and may be designed with a bottom neck. The requirements given in Standard Test Measure on the diameter of the neck of standard test measures apply equally to the diameter of the top and bottom necks of proving tanks.

The top neck should be provided with glass plates or a separately fixed gauge glass(es), on which the scale marks corresponding to the nominal capacity and to variations of at least 1 % of the nominal capacity, in plus and in minus, are marked. Otherwise, the top neck part shall be fitted with a fixed and rustproof metal plate or a sliding plate capable of being sealed and on which the scale marks corresponding to its nominal capacity and to the volumes below and above the nominal capacity, are marked.

The bottom neck should be provided with glass plates or a separately fixed gauge glass(es) similar to the top neck, with scale marks corresponding to volumes of only 0.5 % in plus or in minus of the nominal capacity.

The diameter of the gauge glasses connected to the top and bottom necks shall be large enough to ensure that capillary or meniscus effects do not introduce additional uncertainties such that the maximum permissible errors (±½ 000 of the nominal capacity as given in clause 2.2.2.2 of OIML R 120) are exceeded.

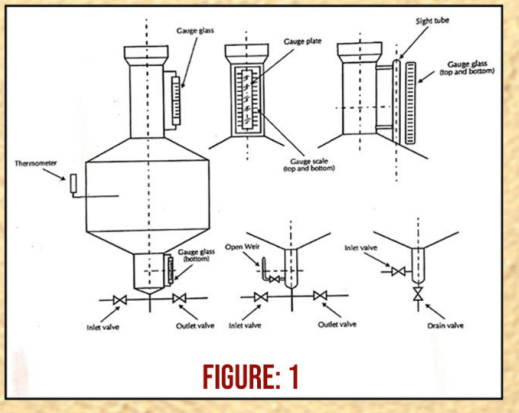


FIGURE: 1

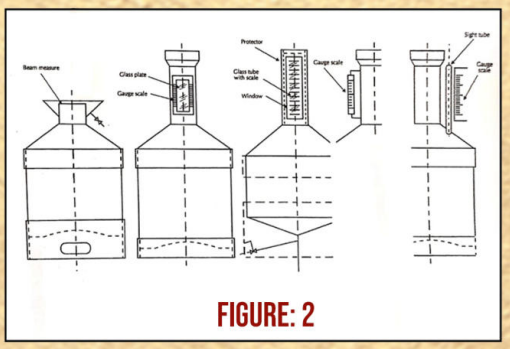


FIGURE: 2

It shall be ensured that the liquids are easily delivered to and from the proving tanks and that no pockets, dents or crevices capable of trapping the liquid, air or vapor are present. Examples of different designs of a proving tank are shown in Figure 2.

The proving tank shall be provided with means for measuring the temperature of the liquid it contains.

When thermometer wells are used for determining the temperature of the test liquid in the proving tank, the minimum recommended number of thermometer wells is given in Table 2.

TABLE: 2

Nominal capacity of a proving tank	up to 500 L	more than 500 L up to 2 000 L	more than 2 000 L
Minimum number of thermometer wells	1	2	3

STAMPING AND SEALING ARRANGEMENT:

The image shows a diagram of a stamping and sealing arrangement, with a focus on the adjusting device and the manhole cover. The diagram illustrates how a sealing wire is used with a seal for security.

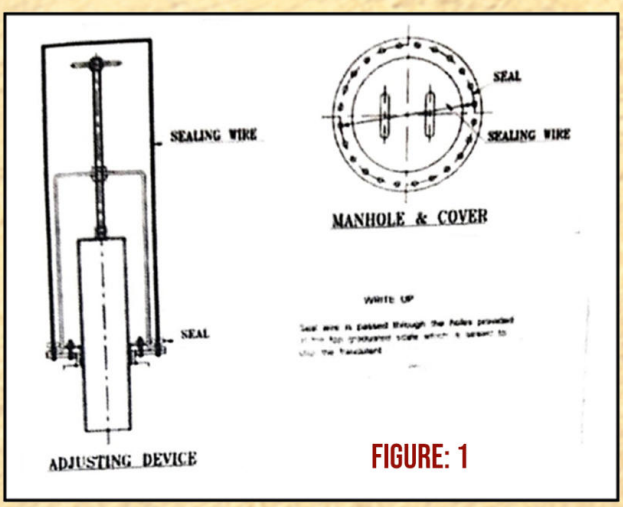
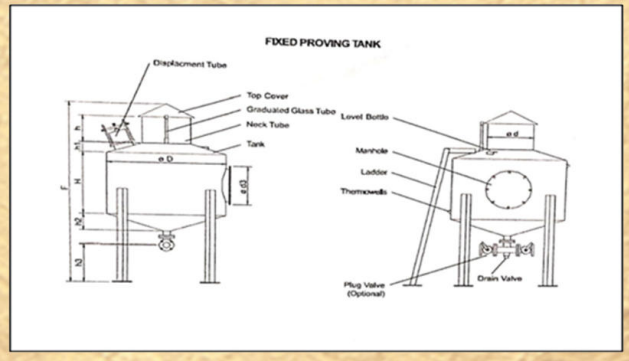
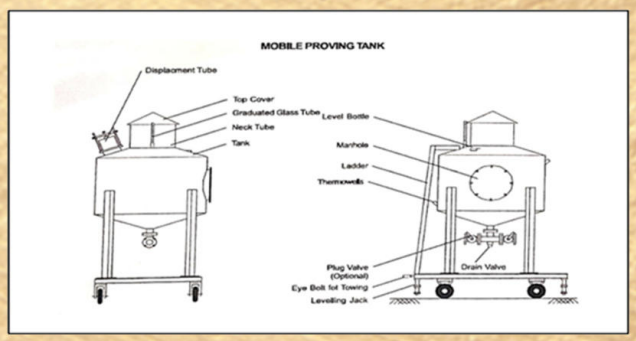


FIGURE: 1

The sealing is done by a seal wire is passed through the holes provided at the top graduated scale which is sealed to stop the fraudulent practices. A typical schematic diagram of sealing provision to prevent the fraudulent practices of the model is given above as Figure 1.

SKETCH AND DRAWING:





TEST PROCEDURE FOLLOWED BY MANUFACTURE:

The test procedures described in clauses 6 to 12 may be used for the testing of the following typical measuring systems:

CLAUSE 6: Meter on its own or fitted with ancillary devices
CLAUSE 7: Fuel dispenser
CLAUSE 8: Measuring system on a road tanker
CLAUSE 9: Measuring system for the unloading of road and rail tankers, ships' tanks and tank containers
CLAUSE 10: Measuring system for the loading of road and rail tankers, ships' tanks and tank containers
CLAUSE 11: Measuring system fitted into a pipeline
CLAUSE 12: Measuring system for milk

The thermometer well shall be deep enough to enable the correct immersion of a thermometer and shall consist of a metal socket with good heat conductivity having one end closed; it shall be inclined so that liquid can be added to the well if desired. The thermometer wells shall be installed with such an immersion that the ambient temperature outside the proving tank will not affect the thermometer.

When the installation of two or three thermometer wells is recommended, these shall be installed in accordance with the following location conditions:
a) in the upper and lower half of the main body, or in the upper and lower third and near the center of the main body of the proving tank, and
b) at two or three points, equally spaced around the circumference of the proving tank.
Where proving tanks are mounted on a truck or trailer, means shall be provided to secure and maintain them in a level position, during testing and use.
For testing certain types of measuring systems (for example, those for the recep¬tion of milk), it may be easier to use proving tanks of the brim measure type.

MATERIALS OF CONSTRUCTION:

BODY :
Carbon steel (internally epicoated)
Stainless Steel

DISPLACEMENT TUBE :
Carbon steel (zinc plated / yellow passivated)
Stainless Steel

GRADUATED GLASS :
Borosil glass

THERMOWELLS :
Carbon steel

DRAIN VALVE :
Carbon Steel
Stainless Steel