

# PRODUCT MANUAL FOR MILD STEEL SLIDING DOOR BOLTS FOR USE WITH PADLOCKS ACCORDING TO IS 281: 2009

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure coherence of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification licence/certificate.

|    |  | 1   |   |  |  |  |  |  |
|----|--|---|---|--|--|--|--|--|
| 1. | Product  | :   | : IS 281: 2009                                      |  |  |  |  |  |
|    | Title  | :   | MILD STEEL SLIDING DOOR BOLTS FOR USE WITH PADLOCKS |  |  |  |  |  |
|    | No. of Amendments  | :   | 1   |  |  |  |  |  |
|    |  |   |   |  |  |  |  |  |
| 2. | Sampling Guidelines:   |   |   |  |  |  |  |  |
| a) | Raw material   | :   | As per Cl.5 of IS 281: 2009                         |  |  |  |  |  |
| b) | Grouping guidelines  | :   | Please refer <b>ANNEX</b> – <u>A</u>                |  |  |  |  |  |
| c) | Sample Size  | :   | 5 nos of door bolts                                 |  |  |  |  |  |
|    |  |   |   |  |  |  |  |  |
| 3. | <b>List of Test Equipment</b>  | :   | Please refer <b>ANNEX</b> – <u>B</u>                |  |  |  |  |  |
|    |  |   |   |  |  |  |  |  |
| 4. | Scheme of Inspection and Testing   | :   | Please refer <b>ANNEX</b> – <u>C</u>                |  |  |  |  |  |
|    |  |   |   |  |  |  |  |  |
| 5. | Possible tests in a day  | :   | All tests   |  |  |  |  |  |
|    |  |   |   |  |  |  |  |  |
| 6. | Scope of the Licence:  |   |   |  |  |  |  |  |
|    | "Licence is granted to use Standard Mark as per IS 281: 2009 with the following scope: |   |   |  |  |  |  |  |
|    | Name of the product  | f the product Mild Steel Sliding door bolts for use with padlocks |   |  |  |  |  |  |
|    | Туре   | Type I (Plate type), Type II (Clip or Bolt type)                  |   |  |  |  |  |  |
|    | Size   |   |   |  |  |  |  |  |

#### **ANNEX A**

### **Grouping Guidelines**

1 Mild Steel sliding door bolts as per IS 281 are classified based on the following:

| Туре   | Size   | Remarks  |  |
|--|--|--|--|
| Type 1 - Plate type  | 150 mm, 200 mm, 250 mm, 300mm, 375 mm and 450 mm | supplied by mutual                               |  |
| Type 2 - Clip or Bolt type with single flap hasp/ double flap hasp | 200 mm, 250 mm, 300mm, 350 mm, 375 mm and 450 mm | agreement between the purchaser and the supplier |  |

- 2. Considering the above, one sample each of the smallest and highest size from each type of door bolt (Plate type/ Clip or Bolt type) shall be tested to cover all sizes in that size-range for that particular type of door bolt.
- 3. The Firm shall declare the varieties of various Door Bolts they intend to cover in the Licence. The Scope of Licence may be restricted based on the manufacturing and testing capabilities of the manufacturer.
- 4. During operation of the licence, BO shall ensure that all the varieties covered in the licence are tested in rotation to the extent possible.

# ANNEX B

# **List of Test Equipment**

Major test equipment required to test as per the Indian Standard

| Sl. No. | <b>Tests used in with Clause</b> | Test Equipment  |
|---------|----------------------------------|---|
|         | Reference                        |   |
| 1.      | Dimensions and Tolerances        | a) Vernier Calliper                                     |
|         | (Clause 6, Fig. 1A, 1B, 2A       | b) Micrometre   |
|         | and 2B, Table 1)                 | c) Countersunk head of Wood Screws designation 9        |
| 2.      | Manufacture (Clause 7)           | a) Vernier Calliper                                     |
|         |                                  | b) Countersunk head of Wood Screws designation 9        |
| 3.      | Finish (Clause 8)                | Test equipment and chemicals as per IS 1378 or IS 1068, |
|         |                                  | as applicable   |

The above list is indicative only and may not be treated as exhaustive.

#### ANNEX C

# **Scheme of Inspection And Testing**

- **1. LABORATORY** A laboratory shall be maintained which shall be suitably equipped (as per the requirement given in column 2 of Table 1) and staffed, where different tests given in the specification shall be carried out in accordance with the methods given in the specification.
- **1.1** The manufacturer shall prepare a calibration plan for the test equipments.
- **2. TEST RECORDS** The manufacturer shall maintain test records for the tests carried out to establish conformity.
- **3. LABELLING AND MARKING** As per the requirement of IS 281:2009.
- 3.1 **PACKING** Packing of Sliding door bolts shall be done as per clause 10 of IS 281:2009.
- **4. LEVELS OF CONTROL** The tests as indicated in column 1 of Table 1 and the levels of control in column 3 of Table 1, shall be carried out on the whole production of the factory which is covered by this plan and appropriate records maintained in accordance with paragraph 2 above.
- **4.1** All the production which conforms to the Indian Standards and covered by the licence should be marked with Standard Mark.
- **5. REJECTIONS** Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act, 2016.

TABLE 1

| (1)          |                             |                  | (2)       | (3)   |                   |   |  |
|--------------|-----------------------------|------------------|-----------|---|-------------------|---|--|
| Test Details |                             |                  |           | Test equipment                                | Levels of Control |   |  |
| Cl.          | Requirement                 | Test Method      |           | requirement                                   | No. of            | Frequency                                     | Remarks  |
|              |                             | Clause           | Reference | R: required (or) S: Sub-contracting permitted | Sample            |   |  |
| 5            | Material                    | Cl. 5, Cl. 7.3   | IS 281    | S   | One               | Each consignment                              | No further testing is required if accompanied with test certificate or ISI marked.   |
| 6            | Dimensions & tolerances     | Cl. 6, Table 1   | IS 281    | R   | 5                 | Each type and size from every hour production | In case of failure of any sample, entire production during the hour shall be checked for dimensions and only those door bolts, which are passing, shall be marked. |
| 7            | Manufacture                 | C1.7.1, 7.2, 7.3 | IS 281    | -   | -                 | Each door bolt                                | -  |
| 8            | Finish (Visual)             | Cl.8.1, 8.2      | IS 281    | -   | -                 | Each door bolt                                | -  |
|              | Finish (Other requirements) | Cl.8.1, 8.2      | IS 281    | R   | 1                 | From each batch of                            | material finished together   |

Note-1: Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empanelled by the Bureau.

Note-2: Levels of control given in column 3 are only recommendatory in nature. The manufacturer may define the control unit/batch/lot and submit his own levels of control in column 3 with proper justification for approval by BO Head.