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| ISO 9001:2008   | Document No: TM/HM/6/331 | Version No:0.0 | Date effective: 17.10.2014 |
| SPECIFICATION OF COVER FOR BRAKE CYLINDER OF UNO, DUO, WST, UNI, & T-EXP.<br>(Part no. W33.139.3) |                          |                |                            |



**RESEARCH DESIGN AND STANDARD ORGANISATION  
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**SPECIFICATION NO. TM/HM/6/331  
(Provisional)**

**SPECIFICATION OF COVER FOR BRAKE CYLINDER OF UNO, DUO, WST,  
UNI, & T-Exp. (PART No. W33.139.3)**

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| Prepared By: | Issued By: |             |

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**SPECIFICATION OF COVER FOR BRAKE CYLINDER OF UNO, DUO, WST,  
UNI, & T-Exp. (PART No. W33.139.3 )**

- 1.0 Scope:** This specification covers the dimensional, functional and material requirements with testing criteria of Cover with Gland for Brake cylinder of UNO, DUO, WST, UNI, & T-Exp tamping machine. This specification may be treated as provisional subject to modifications based on service performance.
- 2.0 Reference documents:** Following IS Specifications have been referred to in this specification. Full sets of relevant drawings and the referred codes/specifications, duly incorporating the up-dated corrections/ amendments, shall be available for reference at manufacturer's works.
- i) IS: 2062 - 1992 - Steel for general engineering purposes - specification.
  - ii) IS: 77-1976 -Linseed oil for paints - specifications.
  - iii) Drg. No.:RDSO/TM/ 07/12 Brake cylinder of UNO, DUO, WST, UNI, & T-Exp machine.
- 3.0 Functional requirement:** It is provided in brake cylinder of UNO, DUO, WST, UNI, & T-Exp. machines as a support to piston rod and sealing of pressure oil. All surfaces meant for machining shall be finished as mention in the drawing no. RDSO/TM/07/12.
- 4.0 Dimension & Tolerance:** Dimensions and tolerances of the Brake cylinder shall be as mentioned in drawing no. RDSO/TM/ 07/12.
- 5.0 Material:** The cover for Brake cylinder shall be made from Mild Steel of Grade A or B conforming to IS: 2062-1992 having minimum tensile strength 410 MPa i.e. 410 N/mm<sup>2</sup> with minimum percentage elongation of 23.
- 6.0 Manufacturing Process:** The cover for Brake cylinder shall be made by either machining from billet / bar of specified material or by forging and machining process.
- 7.0 Marking:** Month and year of manufacture and manufacturer's code / identification shall be engraved / embossed on the non-functioning surface of cover for Brake cylinder.
- 8.0 Inspection And Acceptance Criteria:**
- i) Each components offered by manufacturer shall be checked visually for their surface finish, freedom from defects like porosity, cracks, improper edges etc. Machined surface shall be checked by any suitable pneumatic or electronic equipment.
  - ii) The component found suitable after visual inspection, shall be checked for their dimensions as per relevant drawing.

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- iii) Supplier shall produce the certificate that the raw material use for manufacturing of the component conforms to the IS: 2062-1992 as mentioned in Para 5.0.
- iv) Manufacturer shall also produce a test result of chemical property/ analysis report of billet / raw material used for manufacturing of the component.

Any deviations in the test result from the requirement of the specification and drawing shall be the cause of rejection.

**9.0 Packing and Protection:** Each component shall be protected with one coat of boil linseed oil conforming to IS: -77-1976 (linseed oil for paint) and shall be packed in card board case.

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