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| ISO 9001:2015  | Document No: TM/HM/6/561 | Version No:0.0 | Date effective: 14/08/2024 |
| Specification of Fork for Brake Cylinder of UNIMAT & T-Exp. (Part no.UD214.1508) |                          |                |                            |



**RESEARCH DESIGNS AND STANDARDS ORGANISATION**  
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**SPECIFICATION NO.TM/HM/6/561**  
**SPECIFICATION OF FORK FOR BRAKE CYLINDER OF UNIMAT &T-EXP**  
**(Part no.UD214.1508)**

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## SPECIFICATION NO.TM/HM/6/561

### SPECIFICATION OF FORK FOR BRAKE CYLINDER OF UNIMAT &T-EXP (Part no.UD214.1508)

- 1.0 Scope:** This specification covers the dimensional, functional and material requirements with testing criteria of Fork for Brake Cylinder of Unimat and Tamping Express. This specification may be treated as provisional subject to modifications based on service performance.
- 2.0 Reference documents:** Following documents have been referred to in this specification. Full sets of relevant drawings and the referred codes/ specifications, duly incorporating the updated 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 - specification.
  - iii) RDSO Drg. No. RDSO/TM/11/24 Fork for Brake Cylinder of Unimat and Tamping Express
- 3.0 Functional requirement:** It is provided in the brake system assembly. Fork is used for accelerating brake block, applied when machine is running in work drive mode. All surfaces meant for machining shall be finished as mentioned in the drawing no. RDSO/TM/11/24.
- 4.0 Dimension & Tolerance:** Dimensions and tolerances of the Fork for Brake Cylinder of Unimat and Tamping Express shall be as mentioned in RDSO Drawing No. RDSO/TM/11/24.
- 5.0 Material:** The Fork for Brake Cylinder of Unimat and Tamping Express shall be made from Steel of Grade A or B (Mild Steel) 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:** Fork for Brake Cylinder of Unimat and Tamping Express shall be made by fabrication and machining from plate/sheet of specified material.
- 7.0 Marking:** Month and year of manufacture and manufacturer's code / identification shall be engraved / embossed on the non-functioning surface of Fork for Brake Cylinder of Unimat and Tamping Express.
- 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

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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.
- iii) Supplier shall produce the certificate that the raw material used 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 raw material used for manufacturing of the component.
- v) 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 boiled linseed oil conforming to IS:77-1976 (linseed oil for paint) and shall be packed in card board case.

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