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| ISO 9001:2015  | Document No: TM/HM/6/548 | Version No:0.0 | Date effective: 20.03.2024 |
| Specification of Pin for Measuring Bogie of UNIMAT-3S (Part no.UD210.17) |                          |                |                            |



**RESEARCH DESIGNS AND STANDARDS ORGANISATION  
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**SPECIFICATION NO.TM/HM/6/548**

**SPECIFICATION OF PIN FOR MEASURING BOGIE OF UNIMAT-3S  
(PART NO. UD210.17)**

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## SPECIFICATION NO.TM/HM/6/548

### SPECIFICATION OF PIN FOR MEASURING BOGIE OF UNIMAT-3S (PART NO. UD210.17)

**1.0 Scope:** This specification covers the dimensional, functional, and material requirements with testing criteria of the Pin for measuring bogie of Unimat-3S machines. 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 set of relevant drawings and the referred codes/specifications duly incorporating the updated corrections / amendments shall be available for reference at manufacturer's work.

- i) BS: 970: Carbon manganese Steel - specifications.
- ii) IS: 77- 1976: Linseed oil for paints specifications.
- iii) Drawing No: RDSO/TM/23/23 Pin for measuring bogie of Unimat-3S machines.

**3.0 Functional Requirement:** Pin for measuring bogie is provided in Measuring Bogie of Unimat-3S for mounting the cylinder. All surfaces meant for machining shall be finished as mentioned in the Drg. No. RDSO/TM/23/23.

**4.0 Dimensions and Tolerance:** Dimension and tolerance of the Pin for measuring bogie r shall be as mentioned in drawing no. RDSO/TM/23/23.

**5.0 Material:** The Pin for measuring bogie shall be made of steel grade 080M40 (EN-8) conforming to BS: 970 Carbon manganese Steel.

**6.0 Manufacturing Process:** Pin for measuring bogie shall be made by forging and machining process of specified material.

**7.0 Marking:** Month and year of manufacture and manufacturer's code/identification shall be engraved / embossed on the non-functional surface of each component.

#### **8.0 Inspection and Acceptance Criteria:**

- i) Each component offered by manufacturer shall be checked visually for their surface finish, freedom from defect 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 dimensional characteristics as per relevant drawing.

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- iii) Supplier shall produce the certificate that the raw material used for manufacturing of the component conforms to material specified 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) Minimum one no or 2 % sample of the component randomly picked up out of each lot of consignment and shall be subjected to chemical composition test. The consignee shall test the material for chemical composition at his laboratory or get the material tested in a reputed (NABL accredited or accredited by other international body like APLAC, MRA, ILAC etc) laboratory having proper facilities for testing. Before sending the samples for testing, the same shall be duly sealed and secret coding shall be done.
- vi) Any deviation in the test result 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 cardboard case.

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