

ISO 9001:2015	Document No: TM/HM/6/543	Version No:0.0	Date effective: 30/10/2023
Specification of Fly Wheel for Tamping Unit of Unimat-4S (Part no. CU20.302)			



**RESEARCH DESIGNS AND STANDARDS ORGANISATION  
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**SPECIFICATION NO.TM/HM/6/543  
SPECIFICATION OF FLY WHEEL FOR TAMPING UNIT OF UNIMAT-4S  
(PART NO. CU20.302)**

DTM-VI	EDTM	Page 1 of 3
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## SPECIFICATION NO.TM/HM/6/543

### SPECIFICATION OF FLY WHEEL FOR TAMPING UNIT OF UNIMAT-4S (PART NO. CU20.302)

- 1.0 Scope:** This specification covers the dimensional, functional and material requirements with testing criteria of Fly Wheel for tamping unit of Unimat-4S tamping machine. 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 up-dated corrections/amendments, shall be available for reference at manufacturer's works.
- i) IS:2062-1992 Specification of Steel for general engineering purpose
  - ii) IS:77-1976 - Linseed oil for paints - specification
  - iii) Drg. No. RDSO/TM/13/23 Fly Wheel for tamping unit of Unimat-4S
- 3.0 Functional Requirement:** Fly Wheel is used on Unimat-4S tamping unit for connecting the flange over the motor side. All surfaces meant for machining shall be finished as mentioned in the Drg. No. RDSO/TM/13/23
- 4.0 Dimension & Tolerance:** Dimensions and tolerances of the Fly Wheel shall be as mentioned Drg. No. RDSO/TM/13/23
- 5.0 Material:** The Fly Wheel 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 sq. with minimum percentage elongation of 23.
- 6.0 Manufacturing Process:** Fly Wheel shall be made by forging or machining process from plate /billet 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 Fly Wheel.
- 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.
  - iii) Supplier shall produce the certificate that the raw material used for manufacturing of the component conforms to the Mild Steel Grade A or B of IS:2062-1992 as mentioned in para 5.0.

DTM-VI	EDTM	Page 2 of 3
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- iv) 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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DTM-VI	EDTM	Page 3 of 3
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