

ISO 9001:2015	Document No: TM/HM/6/520	Version No:0.0	Date effective:
Specification of Hydraulic Distributor Block of Unimat-4S (Part no. DL90.53)			



**RESEARCH DESIGNS AND STANDARDS ORGANISATION  
Manak Nagar, Lucknow-226011**

**INFRASTRUCTURE DIRECTORATE  
(Track Machines and Monitoring)**

**SPECIFICATION NO. TM/HM/6/520  
SPECIFICATION OF HYDRAULIC DISTRIBUTOR BLOCK OF UNIMAT-4S  
(Part no. DL90.53)**

**DRAFT**

DTM-III	EDTM	Page 1 of 3
Prepared By:	Issued By:	

ISO 9001:2015	Document No: TM/HM/6/520	Version No:0.0	Date effective:
Specification of Hydraulic Distributor Block of Unimat-4S (Part no. DL90.53)			

## SPECIFICATION NO.TM/HM/6/520

### SPECIFICATION OF HYDRAULIC DISTRIBUTOR BLOCK OF UNIMAT-4S (Part no. DL90.53)

- 1.0 Scope:** This specification covers the dimensional, functional and material requirements with testing criteria of Hydraulic Distributor Block of Unimat 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 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/10/22 Hydraulic Distributor Block.
- 3.0 Functional requirement:** It is provided in tamping unit for oil distribution in all squeezing cylinders of tamping bank. All surfaces meant for machining shall be finished as mentioned in the drawing no. RDSO/TM/10/22.
- 4.0 Dimension & Tolerance:** Dimensions and tolerances of the Hydraulic Distributor block for tamping unit shall be as mentioned in RDSO drawing no. RDSO/TM/10/22.
- 5.0 Material:** The Hydraulic Distributor block for tamping unit 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:** Hydraulic Distributor block for tamping unit shall be made by either machining from billet/bar of specified material or by forging or 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 the Hydraulic Distributor block for tamping unit. All connection number/port shall be marked by punching for the identification of internal connections.

DTM-III	EDTM	Page 2 of 3
Prepared By:	Issued By:	

ISO 9001:2015	Document No: TM/HM/6/520	Version No:0.0	Date effective:
Specification of Hydraulic Distributor Block of Unimat-4S (Part no. DL90.53)			

## 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 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) After found ok in all respect distributor shall be arranged for pressure test at 3 times of maximum hydraulic pressure used in the circuit on test bench. There shall be no leakage/ bursting found at any port.
- vi) 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.

\*\*\*

DTM-III	EDTM	Page 3 of 3
Prepared By:	Issued By:	