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Specification of Sleeve for Tamping Unit (Part no.G20.26b)			



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SPECIFICATION NO. TM/HM/6/195 REV-2

SPECIFICATION OF SLEEVE FOR TAMPING UNIT
(Part no. G20.26b)

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SPECIFICATION OF SLEEVE FOR TAMPING UNIT (Part no. G20.26b)

- 1.0 Scope:** This specification covers the dimensional, functional and material requirements with testing criteria of Sleeve for tamping unit of all tamping 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 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) BS: 970 Part II Specification of direct hardening alloy steel.
 - ii) IS:77-1976 - Linseed oil for paints - specification.
 - iii) RDSO Drg. No. TM/0508 REV-2 Sleeve for tamping unit.
- 3.0 Functional requirement:** It is provided at tamping arm's upper end to hold the connecting rod bolt. It helps in the rotary movement of tamping arm at the time of sequencing. All surfaces meant for machining shall be finished as mentioned in the drawing no. TM/0508 REV-2.
- 4.0 Dimension & Tolerance:** Dimensions and tolerances of the Sleeve for tamping unit shall be as mentioned in RDSO drawing no. TM/0508 REV-2.
- 5.0 Material:** The Sleeve for tamping unit shall be made from Steel of Grade 709 M 40 (EN-19) conforming to BS: 970 Part-II. Specification of direct hardening alloy steel.
- 6.0 Manufacturing Process:** Sleeve for tamping unit shall be made by cast or closed die forging. The sleeve shall be machined to get final shape.
- 7.0 Heat treatment:** Heat treatment of each component shall be done by case hardening process to achieve case hardening of 55 ± 2 HRC up to 1.25 mm depth.
- 8.0 Marking:** Month and year of manufacture and manufacturer's code / identification shall be engraved/embossed on the non-functional surface of Sleeve for tamping unit.
- 9.0 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.

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- ii) The component found suitable after visual inspection, shall be checked for their dimensions as per relevant drawing.
- iii) Minimum one or 2% of sample randomly picked up from each lot of consignment shall be checked for their hardness as per Para no.7.0.
- iv) Supplier shall produce the certificate that the raw material used for manufacturing of the Sleeve for tamping unit conforms to the Grade 709 M 40 (EN-19) of BS:970 Part II Specification of direct hardening alloy steel as mentioned in Para 5.0.
- v) Minimum one no or 2 % sample of the Sleeve for tamping unit 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 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 deviations in the test result from the requirement of the specification and drawing shall be the cause of rejection.

10. 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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