SPECIFICATION NO. TM/HM/6/202 SPECIFICATION OF PIN FOR CLAPPER CYLINDER (Ø 16 X 120) (Part no. 2E32.63a)

- **1.0 Scope**: This specification covers the dimensional, functional and material requirements with testing criteria of Pin for clapper cylinder. This specification may be treated as provisional subject to modifications based on service performance.
- **2.0** Reference documents: Following BS code and IS specifications 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 Carbon manganese Steel specification.
 - ii) IS 2062 1992 Steel for general engineering purpose specification.
 - iii) IS:77-1976 Linseed oil for paints specification.
 - iv) RDSO Drg. No .TM / 0516- Pin for clapper cylinder
- **3.0 Functional requirement:** It is provided over clapper cylinder of all tamping machines to adjust the spacing of tamping arm for tamping of different sleeper spacing. All surfaces meant for machining shall be finished as mentioned in the drawing no. TM/ 0516.
- **4.0 Dimension & Tolerance:** Dimensions and tolerances of the Pin for clapper cylinder shall be as mentioned in RDSO drawing no. TM/ 0516.
- **5.0 Material:** The Pin for Clapper cylinder shall be made from Carbon and Manganese Steel of Grade 080M40 (En-8) conforming to BS: 970 and nut & washer shall be made from steel grade A or B (mild steel) conforming to IS 2062-1992.
- **6.0 Manufacturing Process:** For Pin for clapper cylinder shall be made by either machining from billet of specified material or by forging and 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 Pin for clapper cylinder.

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 use for manufacturing of the component conforms carbon manganese steel grade 080M 40 conforming to BS 970 as mentioned in para 5.0.
- iv) Manufacturer shall also produce a test result of chemical property/ analysis report of billet/raw material used for manufacturing of the component.
- v) Minimum one no or 2 % sample of the Bushing for NJ 219 bearing 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 of the component.
- **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 cardboard case.
