Specification of Bushing for N J 219 Bearing (Part no.2E22.09)



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Track Machine and Monitoring Directorate

SPECIFICATION NO. TM/HM/6/189 REV-2

SPECIFICATION OF BUSHING FOR NJ 219 BEARING (Part no. 2E 22.09)

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- **1.0 Scope**: This specification covers the dimensional, functional and material requirements with testing criteria of Bushing for NJ 219 bearing. 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.
 - iii) BS 970-Part-II Direct hardening alloy steel specification.
 - ii) IS:77-1976 Linseed oil for paints specification.
 - iii) RDSO Drg. No. TM/0502 REV-2 Bushing for NJ 219 bearing
- **3.0 Functional requirement:** It is provided over vibrations of for fixing the bearing NJ-219. It shall be interference fit with the vibration shaft. All surfaces meant for machining shall be finished as mentioned in the drawing no. TM/ 0502 REV-2.
- **4.0 Dimension & Tolerance:** Dimensions and tolerances of the Bushing for NJ 219 bearing shall be as mentioned in RDSO drawing no. TM/0502 REV-2.
- **Material:** The Bushing for NJ 219 bearing shall be made from Direct hardening alloy steel of Grade 817M40(EN24) conforming to BS: 970 Part-II.
- **6.0 Manufacturing Process:** For Bushing for NJ 219 bearing shall be made by either machining from billet 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 Bushing for NJ 219 bearing.

8.0 Inspection and Acceptance Criteria:

- 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 to direct hardening alloy steel of

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Grade 817M40(EN24) conforming to BS: 970 Part-II Direct hardening alloy steel 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 boiled linseed oil conforming to IS: 77-1976 (linseed oil for paint) and shall be packed in cardboard case.

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