

**GOVERNMENT OF INDIA  
MINISTRY OF DEFENCE  
RESEARCH AND DEVELOPMENT ORGANISATION  
DIRECTORATE OF AERONAUTICS(R&D)**

**TYPE APPROVAL NO. : 636**

**ISSUED TO** : M/s FIRTH (INDIA) STEEL CO. LTD.  
40-MIDC, NAGPUR-440 028

**FOR** : **COLD DRAWN & ANNEALED STRUCTURAL  
STEEL BARS GRADE STEEL-45**

**CO-ORDINATED BY** : RCMA (NASIK)

This is to certify that Cold drawn & Annealed Structural Steel Bar Grade Steel-45 designed and developed by M/s FISCO, Nagpur has been tested as per Schedule drawn by Directorate of Aeronautics vide CRE(N)/16091 dt 24.4.91 and found suitable as a substitute for USSR Grade Steel-45 for manufacture of standard parts and other machined parts. The Type Record is placed at Appendix 'A'.

2. **Basis for Approval** :

- (a) Satisfactory conformity of Test Results to the requirement laid down in the Appendix.
3. The Approval Serial No. quoted above must be reflected in all relevant drawings, Contracts and Release Notes.
4. This Approval is contingent upon the quality control aspect of bulk production being cleared by DTD&P (Air), Ministry of Defence, New Delhi.
5. This Approval is valid initially for three years from the date of issue and will have to be renewed subsequently.
6. Prior Agreement of this Directorate will have to be obtained if this approval is to be transferred to any other agency or if changes within Type Record enclosed are effected.

Encl : Appendix 'A'

No. : AERO/RD-132/106/3.

Date : 1 Apr. 1992



(K. SRINIVASA)  
Director of Aeronautics