

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

TYPE APPROVAL No : 616

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

FOR : CARBON STEEL WIRE GRADE STEEL-45

CO-ORDINATED BY : RCMA (NASIK)

This is to certify that Carbon Steel Wire Steel-45 manufactured/developed by M/s.Firth(India) Steel Co.Ltd., Nagpur has been tested as per Schedule drawn by Directorate of Aeronautics vide CRE(N)/16085 dt 24.4.91 and found suitable as a substitute for USSR Grade Steel-45 for use on various aircraft applications. The Type Record is placed as appendix 'A'.

2. Basis for Type Approval :
 - a) Satisfactory conformity of Test Results to the requirement laid down by Directorate of Aeronautics
3. The approval Serial No. quoted above must be reflected in all relevant drawings, Contract and release notes.
4. This approval is contingent upon the Quality Control aspects 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 Directorate of Aeronautics will have to be obtained if this approval is to be transferred to any other agency or if changes within the Type Record are effected.



Encl : Appendix 'A'
No. : AERO/RD-132/106/3
Date : 28 Jun 1991

(K.SRINIVASA)
Director of Aeronautics