

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

TYPE APPROVAL No. : 649

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

FOR : 16 NCD 13 ALLOY BARS

CO-ORDINATED BY : RCMA (NASIK)

This is to certify that the Alloy Steel Bars designed and developed by M/s FIRTH (INDIA) STEEL COMPANY LIMITED, NAGPUR equivalent to FRENCH MATERIAL 16 NCD 13 has satisfactorily met the requirements as per the test schedule No. TS-041 dated 26th Nov 90 approved by Directorate of aeronautics (R&D) and found suitable for use as forging stock for the manufacture of aircraft components. The summary of the type test results is placed at the Appendix.

2. The type approval serial No. quoted above must be reflected in all relevant Drawings, Contracts and Release Notes.
3. This approval is contingent upon the quality control aspects of bulk production being cleared by DTD&P (Air), Ministry of Defence.
4. This approval is valid initially for three years from the date of issue and will have to be reappraised in case there are any changes in processing technology.
5. 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 the Type Record enclosed are effected.

Encl : Appendix 'A'

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

Date : 30th Dec. 1991



(K. SRINIVASA)
Director of Aeronautics