

**GOVERNMENT OF INDIA
MINISTRY OF DEFENCE
RESEARCH AND DEVELOPMENT ORGANISATION
DIRECTORATE OF AERONAUTICS**

TYPE APPROVAL No : 385

ISSUED TO : M/s FIRTH (INDIA) STEEL CO.LTD.
THANE MAHARASHTRA STATE

FOR : ESR QUALITY (WELDING FILLER WIRE GRADE
(I) 20 KH4GMA AS A SUBSTITUTE TO USSR
GRADE 20 KH4GMA FILLER WIRE.

CO-ORDINATED BY : RCMA (NASIK)

This is to certify that ESR quality welding filler wire designed and developed by M/s FISCO. Ltd. Thane, Maharashtra state, as a substitute to USSR Grade 20 KH4GMA filler wire for submerged arc welding has been tested according to tests outlined by Directorate of Aeronautics and has been found suitable for aircraft use.

2. Basis for Type Approval :

Satisfactory conformity to Test schedule No. TS/IND/MAT/ 045 and the test results placed at Appendix 'A'.

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 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 this 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 enclosed are effected.

Encl : Appendix 'A'

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

Date : 23 Nov. 1982



Air Cmde

(S.C.GUPTA)

Director of Aeronautics