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

## TYPE APPROVAL No.: 694

**ISSUED TO** 

M/S MISHRA DHATU NIGAM LIMITED,

KANCHANA BAGH, P.O., HYDERABAD -500 058

FOR

MARAGINS STEEL, MDN 250A FORGED BARS

**CO-ORDINATED BY** 

RCMA (MATERIALS)

This is to certify that Marging Steel, MDN 250A Forged Bars developed by M/s Mishra Dhatu Nigam Limited, Hyderabad have satisfied all the test requirements laid down by Directorateof Aeronautics vide Test Schedule for Type Approval No.CRE(M)/25, dated 12-3-87. This alloy is acceptable for nonweldable aeronautical application for structural components of LCA. Components manufactured from Maraging Steel MDN 250A Forged Bars may, however, require separate testing based on their functional requirements/end use.

- 2. This approval is contingent upon:
  - Composition and source of supply of raw materials being as per Annexure-II and processing parameters as detailed in Annexure-IV (A to D) of Type Record vide Report No.MDN/AMD/TA/18.
  - ii) Batches from series production conforming to the requirements laid down in production specification viz., MilS46850B.
  - iii) Quality control aspects of bulk production being cleared by DTD&P(Air), Ministry of Defence.
  - iv) Compliance of repeat type approval tests should be carried out as called for by Dte. of Aeronautics whenever sufficient reasons warrant.
- 3. The approval serial No. quoted above must be reflected in all relevant drawings, Contracts and release Notes.
- 4. The type approval is valid so long as consistency of quality in series production is maintained.
- 5. Prior agreement of this Directorate will have to be obtained if this approval or production process is to be transferred to any other agency or if any changes in Annexures or in Type record to be effected are effected.

Encl: Appendix 'A'

No : Aero/RD/117/6/3.

Date: 24 Aug 1993.

(K. SRINIVASA)

Director of Aeronautics