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

TYPE APPROVAL No: 566

ISSUED TO : M/s MISHRA DHATU NIGAM LTD., HYDERABAD

FOR : NICKEL BASE HEAT RESISTANT ALLOY: AE435.

CO-ORDINATED BY : RCMA (MATERIALS)

This is to certify AE435, Nickel base heat resistant alloy developed by M/s Mishra Dhatu Nigam Ltd., Hyderabad in collaboration with M/s.Licensintorg, USSR has met all the test requirements stipulated in soviet type certification documents. This alloy has been found suitable for aeronautical applications limiting to projects of soviet origin. The components manufactured from AE435 may however require separate endurance testing based on their functional requirements/end use.

2. This approval is contingent upon:

- i) Composition and source of supply of raw materials being as per the Annexure II A and processing parameters as detailed in Annexure IV A to N of type test record vide report No.MDN/AMD/TA/005 dated 15.10.88.
- ii) Batches from series production conforming to the requirements laid down in respective soviet material specifications.
- iii) Quality Control aspects of bulk production being cleared by DTD&P(Air), Ministry of Defence.
- 3. The approval Serial No. quoted above must be reflected in all relevant drawings, Contract and release notes.
- 4. This type approval is valid as long as consistancy of quality in series production is maintained. In case of any defficiency, repeat type approval as called for by Directorate of Aeronautics has to be fulfilled.
- 5. Prior agreement of Directorate of Aeronautics will have to be obtained if this approval is to be transferred to any other agency or any changes within the Type Record are effected.

Encl: Appendix'I'

No.: AERO/RD-132/117/6/2

Date: 29th May 1989

(K.SRINIVASA)
Director of Aeronautics