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

TYPE APPROVAL No.: 642

ISSUED TO

: M/s MISHRA DHATU NIGAM LIMITED, KANCHANA BAGH P.O., HYDERABAD-500 058

FOR

HIGH STRENGTH LOW ALLOY STEEL 30XGCN2A

CO-ORDINATED BY : RCMA (MATERIALS), HYDERABAD

This is to certify that 30XGCN2A, high strength low alloy steel has been designed and developed by M/s Mishra Dhatu Nigam Limited, Hyderabad in collaboration with M/s Licensintorg, USSR vide Memorandum No. 7311/078401, dated 21st Jan. 1984. It has met all the test requirements laid down by Dte of Aeronautics. The Components manufactured from 30xGSN2A may, however, require seperate testing based on their functional requirements/end use.

2. This approval is contingent upon :

- i) Composition and source of supply of raw materials per the Annexure-II and processing parameters as detailed in Annexure-IVA to K of type test record vide report No.MDN/ AMD/TA/012. dated 9.8.91.
- ii) Batches from series production conforming to the requirements laid down in Soviet material specifications as per USSR memorandum.
- iii) Quality control aspects of bulk production being cleared by DTD&P (Air), Ministry of Defence.
- iv) Compliance of a repeat type approval tests should be carried out as called for by the Directorate of Aeronautics whenever sufficient reasons warrant.
- 3. This type approval is valid so long as consistency of quality in series production is maintained.

4. Prior approval of this Directorate has to be obtained if this type approval or production process is to be transferred to any other agency or if any changes in annexures or in type records are to be effected.

Encl : Appendix 'A'

No. : AERO/RD-132/106/3 Date : 3rd Oct. 1991

(K. SRINIVASA) Director of Aeronautics