

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

**TYPE APPROVAL No : 420**

**ISSUED TO** : M/s HINDUSTAN ALUMINIUM CORPORATION LTD.  
P.O. RENUKOOT,  
DISTT., MIRZAPUR (UP)-231217

**FOR** : **ALUMINIUM ALLOY BARS 5052 (ASM)**

**CO-ORDINATED BY** : RCMA (AIRCRAFT)

This is to certify that Aluminium alloy Bars 5052(ASM) developed by M/s Hindustan Aluminium Corporation Ltd., Renukoot (UP) have been tested according to the specifications BS-4L44 and AIR 9050-AG3 and have been found suitable for aircraft use.

2. The approval serial No. quoted above must be reflected on 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, New Delhi.
4. This approval is valid initially for three years from the date of issue and will have to be renewed subsequently.
5. Prior agreement of 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 : Type Record  
No : AERO/RD-132/121/1  
Date : 13 May 1983

  
(S. C GUPTA)  
Air Cmde  
Director of Aeronautics