## **ANNEXURE**

## (FOR PROCUREMENT OF ALUMINIUM ALLOY BILLETS OF GRADE V96 AND SIZE Ø385 x 900 MM LENGTH IN HOMOGENIZED, TURNED AND ULTRASONICALLY TESTED CONDITION.)

## SCOPE OF SUPPLY:

1. Aluminium Alloy Grade V-96 as per following Chemical Composition:

Cu	Mg	Zn	Mn	Zr	Fe max	Si max	Cr max	Ti max	Other element each max	Total of other elements max
2.0 - 2.6	2.3 - 2.8	8.0 - 8.8	0.3 - 0.6	0.10 - 0.16	0.3	0.7	0.05	0.05	0.05	0.1

- 2. Chemistry to be maintained as per above Chemical Composition range.
- 3. Measurement of Hydrogen Content to be done and controlled within 0.15ml/100gms. Hydrogen measurements shall be taken at both start and finish of each drop.
- 4. Homogenization of all casted logs is to be done.
- 5. All the heats shall be inspected for Micro Analysis for one billet from top and one billet from bottom at three different locations i.e. centre periphery and middle by metallurgical microscope. The average grain size shall be controlled to 250 micron and cell size shall be less than 70 micron. Photographs shall be provided for each heat.
- 6. All the billets shall be ultrasonically tested conforms to class 'A' single defect size dia. 2.00 mm FBH as per AMS 2630B. The test reports shall be signed by UT Level-II personnel and provided to customer.
- 7. Dimensional Tolerances are at Diameter: 385mm (+0/-5mm) and at Length: 900mm (+20/-0 mm).
- 8. Each Billet shall be punched/engraved for Heat No., Log No. and Location for complete traceability.
- 9. Heat wise record related to chemistry, micro examination, ultrasonic testing shall be provided to customer.
- 10. All the billets shall be packed properly to avoid damages, dents during transport.
- 11. Test Certificate shall be provided with consignment consisting of results for-
  - (i) Chemical Composition & Hydrogen content measurement.
  - (ii) Microstructure examination.
  - (iii) Ultrasonic testing.
  - (iv) Dimensional Inspection.