

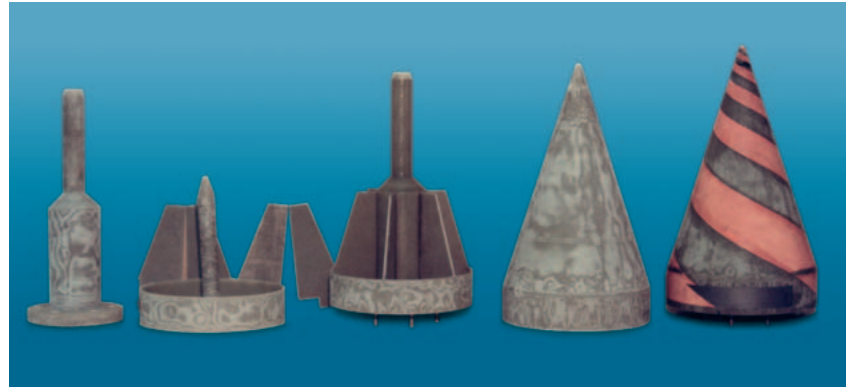


Typical Composite Construction Antenna Structure

The photograph shows the various composite components which form the main structural strength member of the antenna used for Radar & Communications frequency band reception.

They consist of a central hub which after being laid up is machined inside to achieve 'o'ring surface finish and outside to obtain the exterior profile.

The balum tube, webs, base ring and inner cone are produced similarly. These components are then dry fitted, assembled and



boned together using epoxy adhesive. Twin copper spirals are then positioned and are bonded into place.

Finally, the outer cone is then laid up, fully cured and machined to the outer cone dimensions. The antenna assembly is then subjected to testing and qualification to meet the full operating profile of the host platform.



Technical Specification

MATERIALS

Glass Reinforced Plastic

Reinforcement	Plain weave E glass cloth
Resin System	Epoxy LY 5052 & HY 5052
Bonding	Araldite 2014

All materials are resistant to salt corrosion, and in-service fluids and contaminants.

Weight	450 Kgs
Dimensions	330 mm Diameter x 620 mm High
Pressure (Hydrostatic)	70bar
Operational Temperature	-30°C to +70°C
Storage Temperature	-30°C to +70°C