

Environment Simulation and Surface Coatings at SAC

Towards testing of various payload subsystems/systems under simulated space environment parameter like vacuum, temperature, humidity, thermal cycling/shocks etc., SAC is having capabilities for development, establishment and maintenance of large thermovac of 3m & 5.5m diameters with power dissipation of 500W at -100°C over temperature control range of -100°C to +100°C having vacuum level better than 10^{-5} torr apart from numbers of small and medium size thermovac.

SAC is also equipped with numbers of small and medium size climatic test chambers with the maximum size of 2m x 2m x 2m.5m chamber, to dissipate 200W of power at -20°C, with the temperature control range of 70°C to +200°C having relative humidity control from 70% to 95% over the temperature range of +25°C to + 65°C. SAC is also having capabilities of Surface Treatment including Gold plating, Silver plating, Anodizing, Black Anodizing Chromating, electro-less nickel plating etc. on various materials, like, Aluminum, Silver, Kovar etc and Thermal Painting.

SAC invites industry and recognized test laboratories to come forward in offering their environmental test chambers for testing of space and ground systems on outsourcing/contract basis.

(Refer to the Directory of Space Subsystems for Surface Treatment.)