



# **Application Archives**

## **Autoclave**

### **MANUFACTURE OF AEROSPACE COMPOSITES**

Autoclaves are large pressurized vessels that provide a controlled environment of pressure and temperature. Autoclaves are typically used for pressure treating applications and for the pressurized curing of specialty materials like elastomers and composites. They are also used in the sterilization of food products and in the disposal of medical waste. Pressure requirements can range from a vacuum to 1,000 PSI and temperatures may reach 1,000 degrees Fahrenheit.

Autoclaves are used in the manufacture of high technology composite materials for the aerospace and marine industries. These materials are very lightweight with high tensile strength. The precise curing of these special materials requires an aggressive heat up and cool down schedule. Air flow and vessel pressure must be accurately controlled at all times.



Phoenix DS AC drives from US Drives, Inc. meet these manufacturers' requirements. The application requires an AC drive with a fast response to speed commands and an accurate externally controlled current limit circuit. Pressure control requires this AC drive to operate in current limit for extended time periods. US Drives, Inc. was also chosen because of our excellent price, easy Start-Up, compact size and high reliability.