

- **Specialists in large, custom autoclaves for composites, glass, concrete, and lumber**
- **Building the largest autoclaves in the world**
- **Redundant systems**
- **Distributed control systems**



ASC is a recognized leader in the manufacture of large, custom autoclaves for the composites, glass, concrete, and lumber industries.

#### **Largest autoclave in the world**

- ASC has built a 30 ft dia x 75 ft. long autoclave for Vought Aircraft to support Boeing's Model 787 production. The autoclave was field-erected and commissioned in Charleston, SC USA and is the largest autoclave in the world.

#### **Largest composite mast/spar autoclave in the world**

- ASC has designed and manufactured the largest autoclave for composite masts and spars in the worlds. The 8 ft. x 150 ft. long autoclave is installed at Hall Spars Inc. in Rhode Island, USA.
- This autoclave fabricates masts for the 12M boats used in the Americas Cup Challenge.

#### **Features of ASC's large production autoclaves**

- Redundant systems provide unequalled assurance of the run integrity. In a fully redundant ASC autoclave, no single component can cause the run to fail.
- Dual, parallel autoclave fans and multiple burners to insure run integrity on any component failure.
- Advanced CPC computer control system with multiple PC stations in control room, at autoclave door, and at rear of autoclave near auxiliary systems.
- Remote viewing via customer network, including wireless viewing/control via Compositrack PDA units.
- Complete vibration monitoring of all pumps, motors, and fans. Data-acquisition and failure analysis of historical vibration readings.
- Complete SCADA application which monitors and stores all sensor information for long-term SPC data reporting.

- All stainless-steel valving, air tubing, and connections. No plastic tubing on any ASC autoclave.
- Proportional control of vacuum, cooling, pressure, and all process levels.
- Dual compressed air systems for instrument air backup.
- Unique VacTrap XL vacuum system for leak-free vacuum integrity.
- Ergonomic interior design for ease of mobility and function for autoclave operators and loading personnel.
- Multiple oxygen analysis system for superior monitoring of safe air levels throughout autoclave. Automated zone operation insures adequate air supply down length of autoclave.
- Force-air purge systems designed to provide breathable environment within 15-20 minutes after run completion.
- DeviceNet or Profibus communications with all motor starters and drives, providing unequalled monitoring of amperage, phase imbalance, and other power attributes.
- Control systems designed to UL 508, CE, or CSA. Experience with TUV Deuchland as CE notified body.
- All autoclaves designed and modeled with advanced software, including AutoCad 2004, AutoDesk Inventor 9, Compress pressure vessel, and PF Flow fluid flow modeling.