

# AUTOCLAVES

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### OVERVIEW

Cortest has been building safe and reliable autoclave systems for 40 years. These systems are used for high pressure and high temperature test applications. Cortest offers both standard system designs as well as custom configurations to meet the most demanding of applications. **Cortest autoclave systems can be used for a variety of different tests including: corrosion inhibitor analysis, electrochemical studies, performance evaluation of coatings, corrosion studies using weigh loss coupons, shear stress analysis, slow strain rate tests, and much more.** Each pressure vessel is designed in accordance to the ASME Section VIII Div. 1 standard. PED, CSA, CE, DOSH, and the China Special Equipment Manufacture License certificates are available upon request.

**CATEGORIES :** OIL & GAS | STEEL | NUCLEAR | RESEARCH

**STYLES AVAILABLE**  
**MACHINED FROM**  
**SOLID FORGINGS**  
 (No Welds/Overlays)

**PRESSURES UP TO**  
**103.4 MPa**  
 (15,000 PSI)

**TEMPERATURES UP TO**  
**600°C**  
 (1,112°F)

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### SYSTEM FEATURES

- Materials of Construction: 316 Stainless Steel, Hastelloy C-276, Inconel 625, and Titanium from Solid Forgings.
- Bolted Lid Closure with Metallic or PTFE Seal Ring
- Pressures Up to 103.4 MPa (15,000 PSI)
- Temperatures Up to 600°C (1112°F)
- Capacities Up to 20 Liters
- Water-Cooled Feed-Thru Fittings Available for Tensile, Slow Strain Rate, or Fatigue Testing
- Custom Stand Options  
 Fixed Lid or Retractable Body  
 Bench Top  
 Multi-Autoclave
- Custom Porting  
 HIP  
 NPT  
 Isolated Feed-Through  
 Sight Glass Windows
- Magnetic Stirrer  
 In-Line  
 Belt Drive

- Coupon holder options  
 Rotating Cage  
 Rotating Coupon  
 Rotating Cylinder Electrode  
 3 and 4 Point Bend Fixtures  
 Static Coupon

### CONTROLS

- Cortest Model AC-12T  
 Programmable Logic Controller (PLC) Based System Control with Touch Screen Interface
- PC Based with data acquisition  
 Custom Software Development
- Multi-system controls  
 Allows for the Control of Multiple Systems from a Single Controller

### TYPICAL APPLICATIONS

- Slow Strain Rate Testing – NACE TM 0198
- Constant Load Testing – NACE TM 0177
- Low-Cycle/High-Cycle Fatigue Testing

- High Temperature, High Pressure Corrosion Studies – ASTM G111
- High Purity Water Studies for Power Generation
- Long/Short Term Environmental Exposure Testing
- Jet Impingement – ASTM G208
- Rotating Cage – ASTM G184
- Rotating Cylinder Electrode – ASTM G185
- Microbiologically Influenced Corrosion (MIC) Studies
- Electrochemical Studies
- Corrosion Inhibitor Evaluation – ASTM G170
- DCPD Testing – ASTM E647
- New Product Development/Testing
- Performance Evaluation of Coatings
- Supercritical Steam
- 3 and 4 Point Bend Fixtures – ASTM G39

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