AutoClaves

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 weight 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

System Features

- 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

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