



# CORTEST

## HYDROGEN TEST SYSTEMS

These newly developed Cortest, Inc. systems allow gaseous Hydrogen Studies to be safely conducted in an ordinary laboratory environment without the need for a classified area.

Our systems are fully equipped with ATEX certified ventilation fans, gas sensors, IR fire detection, as well as automated valves that allow the user to control the flow of test gases from outside the safety enclosure. With integrated redundancies and multiple fail safes, the systems can be safely used to conduct both static and mechanical studies at high pressure and high temperature.



**NEW DESIGN!**

**Now you can SAFELY test materials in the presence of Hydrogen!**

### FEATURES

- Pressures Up to 55 MPa (7.975 PSI)
- Temperatures Up to 300°C (572°F)
- Safety System equipped with Intrinsically Safe, Explosion Proof Sensors
- Gas Sensors, Pressure Transducers, Flow Switches, and Flame Detectors provide safety and early hazard detection
- Explosion Proof Ventilation Fan with Speeds up to 1.200 CFM to extract hazardous gases

**Designed to work with CORTEST equipment including Autoclave Systems, Load Frames, and DCPD Test Systems**



**CORTEST**

## SERVICES AVAILABLE

- Technical Support
- On-Site Installation & Start-Up
- Maintenance
- Application Support
- Hardware Support
- Warranty Support

## Want More Info?

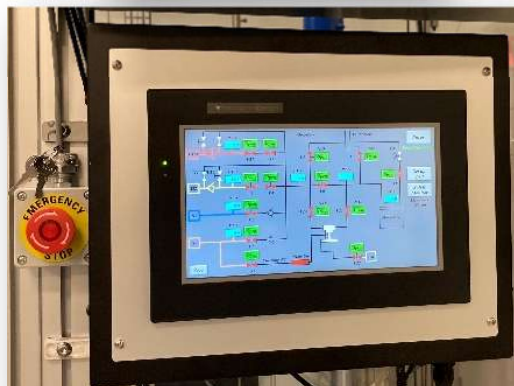
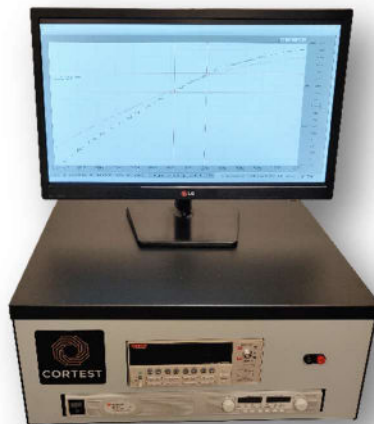
### Contact Us!

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# APPLICATIONS & CONTROLS

## TYPICAL APPLICATIONS

- ASTM Standards E1681, E1820, E647, G129, G142
- Slow Strain Rate Testing - NACE TM 0198
- Constant Load Testing - NACE TM 0177
- Corrosion Fatigue Testing
- High Pressure, High Temperature (HPHT)
- Stress Corrosion Cracking (SCC)
- Electrochemical Studies
- DCPD Testing – ASTM E647
- New Product Development Testing



## CONTROLS

### PLC Enclosure System

- Valve Panel Control
- Fan Control
- Pressure Loss Detection
- Gas, Flame, and Flow Sensing
- Emergency Shutdown
- Alarm System

### PC Controlled Data Acquisition System

### DCPD Capabilities (30A/20V Power Supply)

### LabVIEW Based Software Tests

- Slow Strain Rate Test
- Constant Load Test
- Fatigue Test
- Creep Test