

CORROSION FATIGUE LOAD FRAME

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OVERVIEW

Cortest Corrosion Fatigue (CF) Load Frames use the widely accepted design of the SSRT/CERT load frames but with an advanced drive system. This drive system utilizes a state-of-the-art linear actuator with a gear reduction system and a servo motor that is capable of performing cyclic testing at extension rates up to 3.5 mm/sec and fatigue frequencies up to 2 Hz along with all of the other capabilities of the SSRT/CERT load frames. **This offers an economical alternative to those looking for a corrosion fatigue system at a fraction of the cost of a servo-hydraulic test system.** Each testing system has a built-in data acquisition system with an intuitive setup interface to easily prepare and monitor any test.

CATEGORIES : OIL & GAS | STEEL | NUCLEAR | RESEARCH

DRIVE MECHANISM
ELECTROMECHANICAL
LINEAR ACTUATOR

EXTENSION RATES UP TO
3.5 mm/s

FATIGUE FREQUENCY UP TO
2 Hz

CORROSION FATIGUE LOAD FRAME SYSTEM FEATURES

- Materials of Construction: 17-4 PH Load Components and Inconel 718 Grips/ Pull Rods
- Load Capacities Available in 6,000 lbs (2722 kg) and 10,000 lbs (4,536 kg)
- Pressures Up to 62 MPa (8,992 PSI) with Autoclave Capacities Up to 3.4 Liters
- Temperatures Up to 600°C (1112°F)
- Water-Cooled Feed-Thru Fittings Available
- Fatigue Frequency: Up to 2 Hz
- Extension Rate Range: Up to 3.5 mm/s
- Dual LVDTs for Maximum Sensitivity at Low Load Levels
- Custom Porting
HIP
NPT
Isolated Feed-Through
- Load or Stroke Control

CONTROLS

- PC Controlled Data Acquisition System
- Compact Tabletop Design
- Keyboard/Mouse Interface
- Cortest Model AC-12T
- 23" Monitor
- DCPD Capabilities
- LabVIEW Based Software Tests
Slow Strain Rate Test
Constant Load
Fatigue Test
Creep Test

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 Stress Corrosion Cracking
- Electrochemical Studies
- DCPD Testing – ASTM E647
- New Product Development/Testing
- Supercritical Steam
- Nuclear Flow Loops