



DCPD TESTING

DCPD TESTING OVERVIEW

Direct current potential drop (DCPD) testing is a widely accepted method of measuring crack growth by applying a current to a specimen and measuring the electric potential across the crack plane. As the crack grows, so does the electric potential. Cortest DCPD grips and fixtures are intended to be used with a high temperature and pressure autoclave and in a CERT/SSRT load frame. This way, the specimen can be exposed to a corrosive environment while subjected to tensile, fatigue loads. The grips are electrically isolated so that they do not interfere with the potential measurements. High pressure and high temperature isolated feed through fittings are included with this assembly to provide access to the specimen while maintaining a high pressure, high temperature seal.

CATEGORIES : OIL & GAS | NUCLEAR | RESEARCH

TEST METHODS
ASTM E647, E1920, E399

PRECISE
CRACK GROWTH MEASUREMENT

PROPRIETARY SOFTWARE

DCPD TESTING SYSTEM FEATURES

- Uses Switchable DC Current with Precision Measurements for Determining Crack Growth
- Advanced Software for Measuring Crack Growth with Stability and Accuracy
- Capable of Measuring/Calculating K Values, Crack Length, dA/dN
- Isolated Vessel Feed-Through Fittings
- PC Controlled Data Acquisition System
- LabVIEW Based Software
- Temperature Up To 350°C (662°F)
- Pressure Up To 55 MPa (7,975 psi)

