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**Product Name :**  
Multi-Functional Crack Growth Rate Testing Machine

**Product Code :**  
LBNY-0005-1560005



#### **Description :**

Multi-functional crack growth rate testing machine is used in the corrosive medium environment for measuring the slow strain rate tensile, corrosion fatigue loading and crack growth length. According to the connected corrosive medium environment to configure the suitable experiment caldron in order to satisfy the specific testing requirement. The crack growth measurement uses DCPD method, and can apply in the corrosive medium environment.

The host machine structure is adopted frame type; the loading unit can upside down and fixes in order to meet the different medium environments testing requirement.

#### **Features:**

Integrated form measurement and control system, its convenient to extension.

High rigid overloading framework.

Can use double transformation sensor, specimens transformation measurement accuracy is high.

Pressure-balanced system, can equip water cooling system.

Can achieve crack growth measurement in the corrosive medium environment.

High performance digital servo load control system, the speed control accuracy is high.

#### **Technical Specification :**

Max. Force: 50kN

Force range: 1%~100%F.S.

Loading head measurement accuracy: 0.5%

Loading head displacement resolution: 0.05mm

Force measurement accuracy: 0.5%

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Loading head max. travel range: 80mm  
Deformation measurement resolution: 1m  
Deformation measurement accuracy: 0.5%  
Fatigue loading waveform: sine wave  
Loading head travel speed: 10mm/s 1x10-7mm/s  
Deformation measurement range: 0~20mm  
Crack measurement length resolution: 1m  
Fatigue loading sine wave frequency: 0.0001~1Hz  
Crack measurement length absolute accuracy: 20m  
Experiment caldron cubage: 2.2L  
Experiment caldron max. operating temperature: 600  
Experiment caldron max. operating pressure: 35MPa.



**Laboratory Instrument India**