

walter+bai

w+b

Materials Testing Systems Overview



Multipurpose Dynamic & Fatigue Testing Systems

LFV Series up to 3000 kN

w+b Servohydraulic Multipurpose LFV Series are versatile and high-performance Test Systems available in different, robust configurations covering a wide range of monotonic, dynamic and fatigue applications in the Aircraft & Aerospace, Automotive, Biomedical, Steel, Fastener, Rail or Marine industries as well Civil Engineering and R&D Testing Laboratories world-wide.

These servohydraulic systems are indispensable units of many laboratories in the field of quality control, product development or scientific research. The LFV Servohydraulic Test Systems are modular constructed, covering the full spectrum of tests requirements and can be configured to a wide range of different test setups including TMF (Thermo-Mechanical Fatigue), LCF (Low-Cycle Fatigue), Fracture Mechanics, HCF (High-Cycle Fatigue), high-strain rate as well as component, manufacturing assemblies and finished goods testing.

Depending on application we offer high stiffness, ergonomic and reliable load frames with actuators integrated in the machine base or mounted on upper crosshead.

The LFV series can be configured with a variety of grips and fixtures, extensometers, environmental simulation chambers and furnaces, different software packages and other accessories to suit your specific testing needs.



w+b Materials Testing Systems



Key Features

- Latest digital control electronics with closed loop control and high data acquisition rate, and self-identification transducer coding
- Rigid machine frame with high stiffness, provides superior axial and lateral stiffness and guarantees robust, durable and long-term operation
- Increased stiffness means higher efficiency, as the amount of energy needed to overcome the frame deformation in each loading cycle is less
- To increase the stiffness, appropriate column diameter and rigid crosshead with base platen are provided, this results in increased weight of load frame, which in turn improves the natural frequency of the load frame and reduces vibration delivered to laboratory floor / building.
- Test space adjustment available by mechanical and automatic lifting systems
- Hydraulic passive clamping (Version HH) system assures that the upper crosshead is clamped to columns without applying any hydraulic pressure
- Accurate & parallel upper crosshead movement for improved alignment (elimination of machine's bending strain in the sample).
- Double acting and double ended equal area servo actuator with hydrostatic 4-pocket bearings for the best friction-free static and dynamic performance, with virtually service-free operation.
- Highly accurate load cell and digital displacement transducer
- High performance servovalve(s)
- Enhanced safety features for best protection of operator during testing
- Alignment fixtures with related alignment verification equipment
- Ergonomic design

Testing Machines