

Sleeper Testing Machine

The High-Stiffness Hydraulic Test Frame is a versatile and robust system designed for advanced static and dynamic testing, featuring a 3-point bending setup and integrated safety-protected side doors for easy specimen handling. It incorporates the EcoHydraulic system, offering improved efficiency, adaptive flow and pressure control, reduced maintenance, and lower oil consumption, along with closed-loop force and displacement control via a high-response servo valve. The system uses advanced MD5i control electronics with 24-bit resolution and 10 kHz loop frequency for highly precise test control. High-performance sensors, including a force transducer and a non-contact magnetostrictive stroke sensor, ensure accurate measurements during testing. Comprehensive safety systems, including interlocked doors, real-time alarms, and hydraulic piston locking, provide maximum operational safety and reliability.

