

DATASHEET

MULTILOADER **EmS**

Automatic Electromechanical Variable Speed 50 kN Tester



The new MULTILOADER EmS is the versatile solution for laboratories needing fully automatic performance and elaboration of displacement-controlled tests.

User-friendly, compact and standalone, the tester comes pre-set with 18 Standard-compliant testing profiles that will allow even less experienced operators to perform a wide range of complex displacement-controlled test methods.

The further addition of our optional software will enable the machine to run tests remotely using a PC, increasing your laboratory efficiency and delivering higher value for your customers.

Ideal solution for the automatic performance and elaboration of displacement-controlled tests for:

- Road and Soil Labs
- Material Labs

Replacing our *Automatic Speed Testers*, this new model includes significant improvements to the operator interface and machine performance:

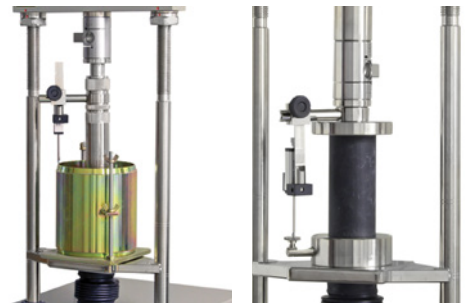
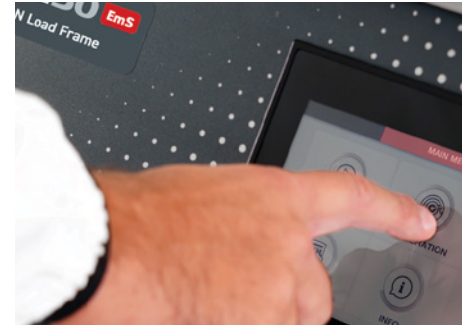
- **User-friendly display**— wide high resolution 7" color graphic touchscreen display.
- **Flexible data acquisition** — up to four channels for external displacement transducers, two channels for load cells plus one channel for crosshead travel allowing for a wide range of test methods to be performed.
- **Remote control** — by using our newly released PC software (optional), allowing easy and convenient data management and effortless printing/saving of customized test reports in Excel format.
- **Optimum load measurement accuracy** — obtained with 19-bit effective resolution (524,000 divisions).
- **Large storing capacity** — 16 GB memory internal memory. Stored data can be exported to your PC by using a USB key or downloaded in real time via the RS 232 serial port.

MultiLoader at a Glance

- Stand-alone automatic digital load frame
- Universal machine suitable for a wide range of tests
- Closed-loop displacement control
- 18 pre-set testing profiles according to Standards
- Automatic failure detection
- 7 channels onboard data acquisition
- Integrated transducer calibration facility
- Infinitely variable speed from 0.05 to 51 mm/min
- 7" touchscreen capacitive color display for viewing real-time graph and test data
- Automatic execution of a wide range of test methods: CBR, Marshall, Indirect Tensile, etc.
- Shorter testing time thanks to the rapid approach and return functions
- Remote control via PC by using optional software
- Easy access CE emergency stop button

Models and Technical Specifications

Models 34-	V1182	V1184
Testing speed	from 0.05 to 51 mm/min	
Type of control	Displacement	
Channels	1 for crosshead travel, 2 for load cells, 4 displacement transducers	
Data download	RS232 and USB ports	
Channel resolution	19 bit for load channels 16 bit for displacement channels	
Memory	16 GB	
Sampling frequency	up to 100 Hz	
Max ram travel	100 mm	
Remote control	using optional software	
Compression capacity	50 kN	
Approach speed	40 mm/min	
Max vertical span	765 mm	
Horizontal span	270 mm	
Overall dimensions (WxDxH)	435 mm x 670 mm x 1265 mm	
Net Weight (machine only)	90 kg Approx.	
Single-phase line voltage	220-240 V	110 V
Frequency	50-60 Hz	60 Hz
Power	750 W	



Ordering Information

34-V1182 MULTILOADER EmS

50 kN automatic electromechanical universal tester
220 – 240 V / 50 – 60 Hz / 1 Ph

34-V1184 MULTILOADER EmS

50 kN automatic electromechanical universal tester
110 V / 60 Hz / 1 Ph

NOTE: Load cell(s), displacement transducer(s) and specific accessories are not included.

Standards

- ✓ **CBR:** EN 13286-47, ASTM D1883
- ✓ **Marshall:** EN 12697-34; ASTM D1559, D5581, D6927
- ✓ **Indirect Tensile:** EN 12697-23; ASTM D4123; AASHTO T283
- ✓ **Unconfined compression:** ASTM D2166; BS 1337
- ✓ **Quick triaxial:** AST D2850; BS 1337
- ✓ **Indirect tensile on bituminous mixtures:** EN 12697-12; EN 12697-23; ASTM D4123; CNR 34

CONTROLS

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