

**DATASHEET**

## SPEEDLOADER **EmS**

### Automatic Electromechanical Variable Speed 50 kN Tester



**SPEEDLOADER EmS is the perfect solution for laboratories who need to perform fully automatic displacement-controlled tests.**

**Replacing our *Variable Speed Tester*, it includes significant improvements to the operator interface and machine performance:**

- Updated compact design with use of premium materials
- Intuitive Graphical User Interface with waterproof and responsive membrane keyboard (128 x 80 pixel)
- Dedicated internal memory able to store up to 300 tests
- Graphic printer available as an option
- RS 232 serial port for fast runtime data download to PC (including load/displacement/time graph readings)
- Three 16-bit analogue channels (one for crosshead displacement, one for load cell and one displacement transducer)

As per our previous and well-loved Multispeed models, the new SpeedLoader allows to change the test speed from 0.2 to 51 mm/min.



The SPEEDLOADER EmS universal automatic tester is a compact and versatile machine ideal for road based laboratories.

With its 50 kN capacity and fully variable test speed (from 0.2 to 51 mm/min), this tester can not only perform CBR and Marshall tests but also many other applications where a fully automatic Closed-loop displacement control is required. Its built-in display for the acquisition of load and displacement data in real time makes it easy to use.

**An ideal machine for:**

- Road and Soil Labs (Indirect Tensile, CBR, Unconfined Compression, Custom, etc.)

#### **SPEEDLOADER at a Glance**

- Fully automatic Closed-loop displacement control
- CBR, Marshall, Indirect Tensile, Uniaxial Compression and custom profiles test speed can be selected by default
- Easy set-up of variable testing speeds from 0.2 to 51 mm / min
- LCD 128x80 pixels display
- Shorter testing time thanks to the rapid approach and return functions
- Fast calibration with our advanced firmware
- Easy access CE emergency stop button

# Models and Technical Specifications

Models 34-	V1082	V1084
Testing speed	0.2 to 51 mm / min	
Type of control	Displacement	
Channels	1 for crosshead travel, 1 for load cell, 1 displacement transducer	
Data download	RS232 port	
Memory	Up to 300 tests	
Channel resolution	16 bit	
Sampling frequency	Adjustable between from 1 to 20 Hz	
Max ram travel	100 mm	
Compression capacity	50 kN	
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	800 W	



SPEEDLOADER EmS with Marshall accessories conforming to:  
 EN 12697-34; ASTM D1559; ASTM D5581; ASTM 6927; AASHTO T245; BS 598-107; NF P98-0251-2; DIN 1996; CNR 30

SPEEDLOADER EmS with unconfined compression accessories conforming to:  
 EN 12697-12; EN 12697-23; ASTM D4123; CNR 34

## Ordering Information Standards

### 34-V1082 SPEEDLOADER EmS

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

### 34-V1084 SPEEDLOADER EmS

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

**NOTE:** Load cell, displacement transducer and specific accessories are not included.

- ✓ **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
- ✓ **Flexural strength:** ASTM D1635
- ✓ **Quick triaxial:** AST D2850; BS 1337
- ✓ **Uniaxial compression:** ASTM D1633
- ✓ **Punching test on clay block for flooring:** UNI 9730-3
- ✓ **Indirect tensile on bituminous mixtures:** EN 12697-12; EN 12697-23; ASTM D4123

## CONTROLS

**Italy** (HEAD OFFICE)  
 t +39 02 92184 1  
 f +39 02 92103 333  
 e sales@controls-group.com  
 www.controls-group.com

**France**  
 info-fr@controls-group.com

**Mexico**  
 info-mx@controls-group.com

**Poland**  
 info-pl@controls-group.com

**UK**  
 info-uk@controls-group.com

**USA**  
 info-usa@controls-group.com