

UNIFRAME-MINI

Automatic testing machine for transverse deformation of tile adhesives and grouts



- Compact, solid and ergonomic design
- Class 1 accuracy (load and deformation)
- High productivity
- Fully automatic test cycle. The complete test cycle is automatically performed by simply pressing the start button. Correct test execution conforming to the reference Standard is continuously and automatically controlled.
- Soft roller-to-specimen contact and smooth load rate control from the very beginning of the ramp
- Connects to laboratory network via LAN port/software
- Allows remote verification of settings and performances and easy debugging of unexpected malfunctions

This is just one of more than 4.000 products manufactured by CONTROLS, the global leader in Testing Equipment for the construction industry in three business areas:

- Concrete and cements;
- Asphalt and bituminous mixtures;
- Soil and rocks.

Standards EN 12002

The UNIFRAME-MINI machine is a fully automatic unit specifically designed for transverse deformation testing of tile adhesives and grouts in conformance with the stringent requirements of EN 12002.

Great attention has been given to the machine design, as shown by the high-stiffness frame which allows wide access to the test area, the robust loading anvil and supports, the easily readable touchscreen graphic display mounted at head-height and oriented towards the user at a comfortable angle, the appropriately positioned connection ports on the rear of the machine and the compact and ergonomic overall construction. During operation, the machine measures the transverse deformation of a tile adhesive or grout strip specimen with prescribed dimensions (3mm thickness), whilst subjecting it to a 3-point bending load which

is gradually increased in such a way that the transverse deformation is constant at 2mm/min.

The test is completed when failure occurs.

The transverse deformation rate is automatically controlled by an advanced closed-loop controller based on a customized algorithm.

Technical specifications

- 250 N maximum load capacity
- Load cell and device measuring the specimen transverse deformation are included
- Loading anvil and supports are included
- 240 x 128 pixel touchscreen graphic display showing numbers and diagrams
- Effective sampling and control rate up to 50/sec
- 17-bit effective resolution
- 30mm actuator stroke
- Data storage on USB pen drive (included)
- Connection to PC via LAN port (communication software is included)
- Multiple selection of languages and units
- Real-time clock and date
- Closed-loop PID control of transverse deformation rate and load rate (selectable by the user)
- Maximum power absorption: 50W
- Overall dimensions (wxdxh): 440x300x 550mm
- Weight: 25kg (approx.)

Accessories

70-T0108/M1

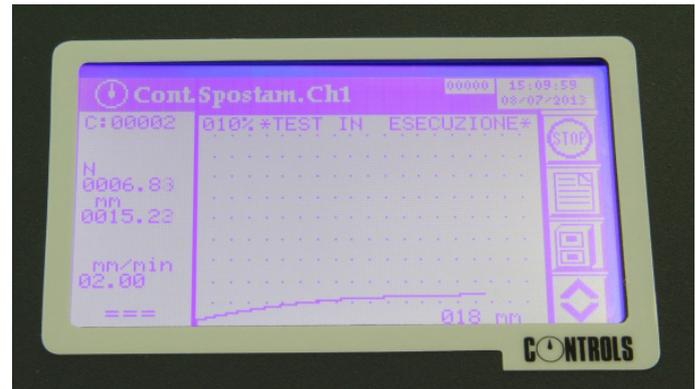
Rectangular frame for specimen preparation to EN 12002, internal dimensions 280 x 45 mm, 5 mm thickness

70-T0108/M2

Mould for specimen preparation to EN 12002, dimensions 300 x 45 mm, 3 mm thickness

70-T0108/M3

10 kg weight for specimen preparation to EN 12002



Detail of the touchscreen graphic display



Detail of load cell, test supports and loading anvil

Ordering information

70-T0108/MINI

Automatic testing machine UNIFRAME-MINI for transverse deformation of tile adhesives and grouts conforming to EN 12002. Digital user interface adopting wide touch screen graphic display with resolution 240x128 pixel. Supplied complete with load cell 250 N capacity and measuring device for specimen deflection. 230/110V-50/60Hz-1Ph

Rectangular frame (70-T0108/M1), specimen mould (70-T0108/M2) and 10 kg weight with handles for sample preparation to EN 12002

