

Minilab PVF-C

Use and Function

The Minilab is designed to determine the most frequently required sand values in a foundry. For this purpose, the following can be performed:

- Preparation of cylindrical standard test specimen of green sand $\varnothing 50 \times 50$ mm or $\varnothing 50,2$ mm x 2 inches and core sand test bars 22,4 x 22,4 x 170 mm (option)

Determination of:

- Compactability in %
- Green Compressive Strength (N/cm²)
- Splitting Strength (N/cm²)
- Twin Transverse Shear-strength (N/cm²)
- Transverse Strength (N/cm²)
- Bending (elasticity) (mm)

All test values measured are displayed on the control board in relevant units in different languages and can be printed out on a separate printer for quality records.

The Minilab is equipped with a free programmable control Siemens S7 with a second interface for connection to a PC. Via control board, the individual tests can be easily selected and carried out. The unit is connected to the compressed air net with a minimum pressure of 5 bar.

Advantages:

- Multipurpose system to produce test specimen and carry out tests
- High accuracy
- No measurement faults due to electronic operation
- Guaranteed reproducibility
- Easy operation
- No maintenance required

Utilities:

- Necessary tools for preparation of all tests and specimen indicated
- Filling device, sand chute
- Printer

Options:

- Preparation of standard test bars 22,4 x 22,4 x 170 mm
- Preparation of wet tensile strength specimen
- Determination of flowability
- Tools for the inch system
- The Permeability Meter and Wet Tensile Strength apparatus can be connected to the system. Both items must be equipped with pressure transformer



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Preparation of standard specimen

Ø 50 x 50 mm or
Ø 50,2 mm x 2 inches

Compactability

in %



Twin Transverse Shear Strength

on standard specimen Ø 50 x 50 mm or
Ø 50,2 mm x 2 inches

Measurement values in N/cm²
or PSI



Determination of transverse strength

on standard test bars
22,4 x 22,4 mm

Measurement values in N/cm² or PSI



Compressive Strength

on cylindrical standard test specimen
Ø 50 x 50 mm or Ø 50,2 mm x 2 inches

Measurement values in N/cm² on PSI



Splitting Strength:

on cylindrical standard test specimen
Ø 50 x 50 mm or Ø 50,2 mm x 2 inches

Measurement values in N/cm² on PSI

Technical Data

Height: 830 mm

Length: 400 mm

Width: 250 mm

Weight: 56 kg

Power Supply 230 V / 50 Hz

Compressed air supply min. 5 bar

Control system: Siemens S7

All measurement values are indicated in N/cm², kN/cm² and mm. Indication in PSI and inches inclusive corresponding tools on request (options). Text display in English, German, French and Italian. Other languages on request.