Mecmesin
testing to perfection

Shotcrete Penetrometer

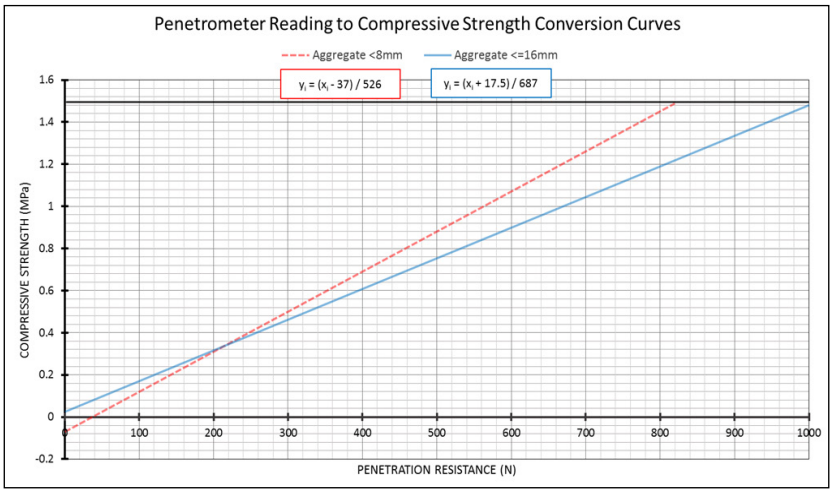
BS EN 14488-2 (Method A)

Verification of consistency is vital in the initial stages of the concrete curing process in order to ensure maximum strength. During this phase, multiple needle penetration tests provide a reliable indication of texture, and can be considered in conjunction with other tests as the mixture hardens over time.

Mecmesin's shotcrete penetrometer provides accurate readings of the forces required to penetrate sprayed or poured concrete during the first few hours of development, giving a reliable indication of compressive strength. Its accuracy and portability make it ideal for on-site testing to BS EN ISO 14488 (Method A) and related standards.

Concrete penetration testing ensures:

- **Accuracy and repeatability**
- **Optimum reliability**
- **Optimum safety**
- **Minimising of costly down time**
- **Consistent quality in concrete layers**
- **Compliance with recognised standards**
- **Simple operation suitable for unskilled staff**



Related Standards:

EN 14488-2, DIN EN 14488-2,
ISO 14488, BS ISO 14488

Key Features

- Sturdy, cleanable and portable design
- Built-in 1000 N loadcell
- Quick and easy penetration needle swapping
- Inverted display for ease of reading
- Live peak force readings for instant monitoring
- Measurement units in N, kN, mN, lbf, kgf or gf
- Accuracy ±0.1% of full scale far exceeds requirements
- Penetrometer needle adaptor and 15 needles
- Store up to 500 readings in memory
- RS232 data output to printer or SPC systems
- Resolution 1:5000

Contact Mecmesin today

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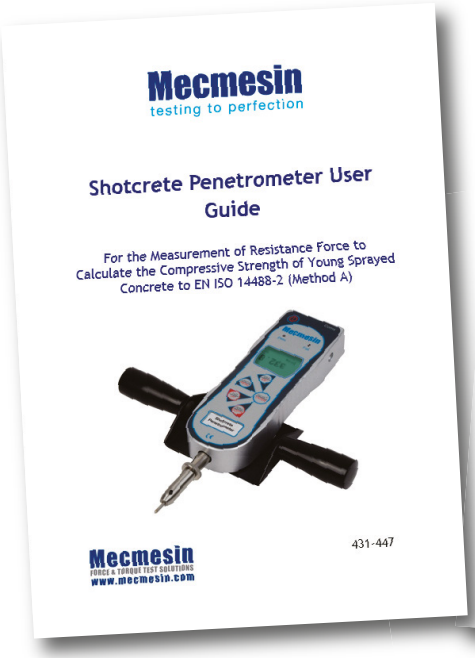
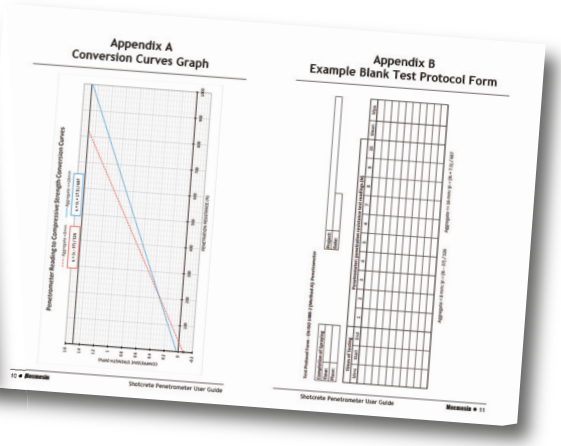
Mecmesin Shotcrete Penetrometer includes:

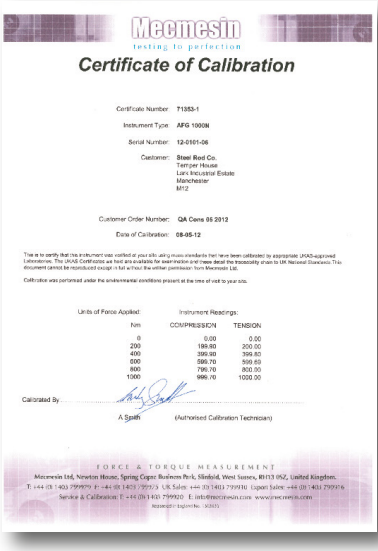
1000 N gauge & dual handle cradle	30 mm extension rod, penetration needles & adaptor
• Handle aids uniform insertion force • Dual grip adds stability and efficiency in obtaining quick readings	• Removable if required • Helps access to difficult locations • Needle diameter: 3 mm • Top angle: 60 deg • Length: 15 mm • Includes: 15 needles



Complete step-by-step instructions for using the penetrometer to measure and report the test results to the standards.

Also includes example compressive strength conversion curves and a blank test protocol form.





Delivered with a calibration certificate traceable to UK national standards.

As used by SIKA, Dragados Sisk Joint Venture and Costain Laing O'Rourke
Ordering information: Shotcrete Penetrometer, part number = 850-501

Mecmesin reserves the right to alter equipment specifications without prior notice. E&OE

bsi.
UKAS MANAGEMENT SYSTEMS 003
FS 58553

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datasheet ref: 431-428-03