Contemporary Measuring of Setting Processes

8-Channel Ultrasonic Measuring System IP-8
Precise measurement of setting processes in

DEVELOPMENT | PRODUCTION | RESEARCH & TEACHING

IP-8 System in use

Main Features
- High-precision measuring system (resolution 0.05 μs)
- 8 independently controllable channels
- Intuitive software for control & evaluation
- Simple and easy to use in everyday lab work
- Suitable for industrial applications
- Optional PLC control & integration in production lines

Analysis of Ultrasonic Speed

Applications
- Any material with a setting process (e.g. cement, mortar, gypsum, concrete, adhesives systems)
- Heat insulation & render systems
- Construction chemicals, additives
- Refractories, castables
- Food industry

8-Channel Ultrasonic Measuring System IP-8
UltraTestLab® - Control and Evaluation Software

- During measurement simultaneously visible:
  1. Ultrasonic **speed** in m/s or **runtime** in μs
  2. Curve **derivation** (acceleration) or **curvature**
  3. **Temperature** inside the sample (-20 ... +125 °C)
  4. **Compressive strength** correlation (optional)
  5. **Shrinkage/swelling** by connection of “shrinkage grooves” (optional)
- Reproduction of characteristic points such as e.g. initial set and final set with graphic markers
- Permissible deviations against reference measurements definable with envelope function
- Evaluation, **Excel export** and printouts possible during measurement
- Dynamic **elastic modulus** calculation and display
- Measurement of **prisms** and other hardened test specimens
- Flexible user interface allows operation in various languages

**Advantages of Ultrasonic Measurements**

- Precise display of the setting process enables a new era of product development
- Immediately visible results are one of various reasons for saving in time and cost (30 % confirmed by users)
- Exact reproducibility of measurement results allows identification of deviations at an early stage
- Strength development from initial mix to 28-day strength in a single measurement
- Intuitive software operation makes it perfect for laboratory use
- Easy cleaning and refilling of the measuring moulds is a key to permanent use
- Special tools such as e.g. graphic marks and envelope make the system ideally suitable for quality assurance and production

We would be pleased to present our system at your premises. Just give us a call!

**UltraTest Systems - References**

Mortar, plaster, thermal composite system

![Mortar, plaster, thermal composite system logos]

Refractories, castables

![Refractories, castables logos]

Cement, concrete, construction materials

![Cement, concrete, construction materials logos]

Construction chemicals, additives, waterproofing

![Construction chemicals, additives, waterproofing logos]

Facades, floor, roofing systems, drywall

![Facades, floor, roofing systems, drywall logos]

Universities, research, teaching

![Universities, research, teaching logos]