GLÖTZL Baumeßtechnik

Dynamic Measuring Device

Type: DMA 6031E

Art. No.: 51

The dynamic measuring device (type DMA 6031E) consists of three different components which are all optimally synchronized to each other.

1. **The connection boxes:**
   The lines of the sensors to be measured are connected to the connection boxes.
2. **The measuring device:**
   The measuring signals are led from the connection boxes to the measuring device by collecting lines. The measuring device itself is delivering the supply of the electric sensors, the signal conditioning and also the adaptation to the subsequent measured value board in PC.
3. **The computer unit:**
   A collecting line is leading from the measuring device to the computer unit. There, the measured values are digitalized with a resolution of 16 bits, administrated and stored.

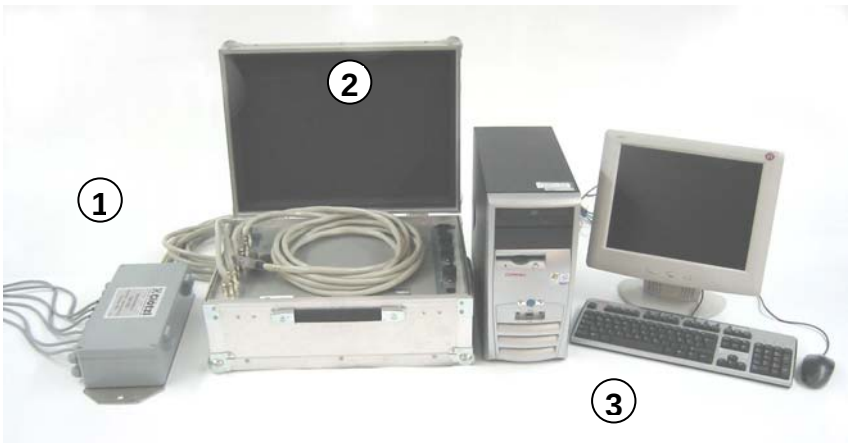
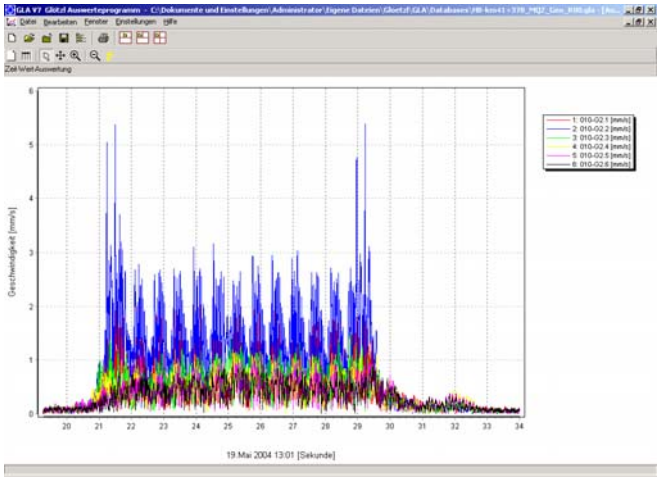


Fig.:Complete system: Dynamic measuring device

Fig.: Measuring device

Technical data:

Sensors:	Connection of up to 30 pieces pressure sensors (e.g. pore water pressure sensors)
Scanning rate:	from 1 up to 1,000 Hz
Storage:	100,000 meas. values each channel
Meas. times:	Examples:
	With 1 Hz : 27.7 hrs.
	With 10 Hz: 2.7 hrs.
	With 100 Hz: 16.6 hrs.
	With 1.000 Hz: 1.6 hrs.
Evaluation:	Import of selected measurements into the Glötzl „GLA“ program



Application fields:

Dynamic recording of the following physical sizes:

Pressure, e.g. pore water pressure, stress e.g. concrete stress, oscillation speed, inclination (vibrations)

References see overleaf

References:

1. Pore water pressure- and concrete stress measurements in different depths under a track bed course in „Elsfeth“ and „Waghäusel“.
2. Oscillation speed measurements at a railroad embankment (new construction line „Augsburg–Olching“)
3. ABS Berlin – Cottbus
   Dynamic pore water pressure measurement in a decontamination section at train crossings
4. LMBV
   Tube measurement „Bergheider See“ – Dynamic measurement of tube deviation of a drain pipe DIN 1200 at different load conditions. Determination of internal frequences by means of FFT.
5. PBDE
   Dynamic measurement of stress monitoring station at train crosses. Determination of stress conditions.

GLÖTZL Gesellschaft für Baumeßtechnik mbH · Forlenweg 11 · 76287 Rheinstetten · Germany
☎ +49 (0)721 51 66 - 0 · 🖷 +49 (0)721 51 66 - 30 · http://www.gloetzl.com · info@gloetzl.com

© Glötzl Gesellschaft für Baumeßtechnik mbH