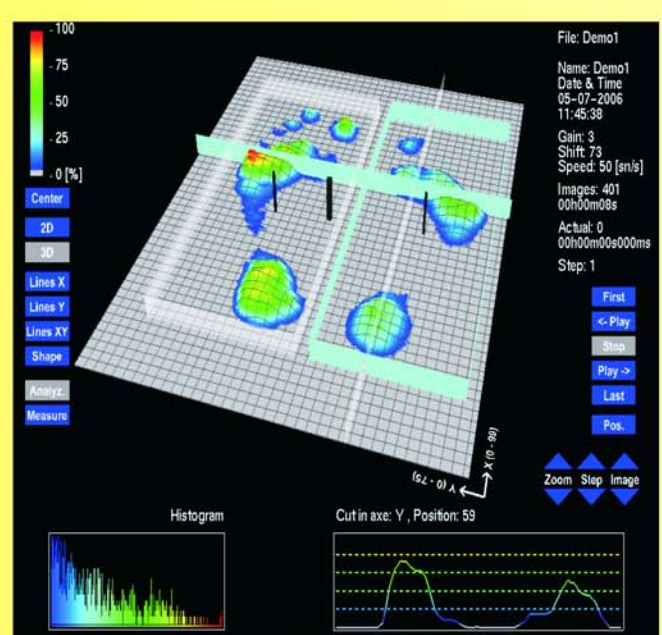
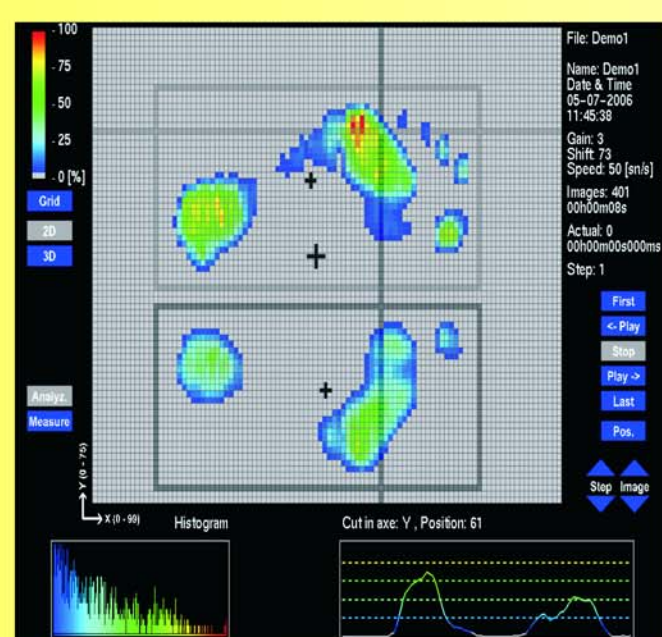


Plantograf V09

System performance

Plantograph V07 is used for the biomechanical investigation of the pressure distribution between the foot sole and the miniature pressure's sensors in matrix arrangement. This one is mentioned for the men's gate analyses, the great joints identification statement, stability, etc. Being mentioned, as portable device to be in co-operation the PC, with - to be processed the variable time pressure signals in real time, either in the static- and either in the dynamic-loading mode, too.

The instrument has concentrated 7500 sensors (3x3 mm each) on the active area, as large as 300 x 400 mm; being possible to receive and to be processed 300 the full snaps in 1 second, what is one of the world top parameters. The pressure distribution snap is realised in 256 colour's levels in 2D or 3D mode-view. Any time, the all recent data can be read to the SW again, and to be processed as just measured, ones.



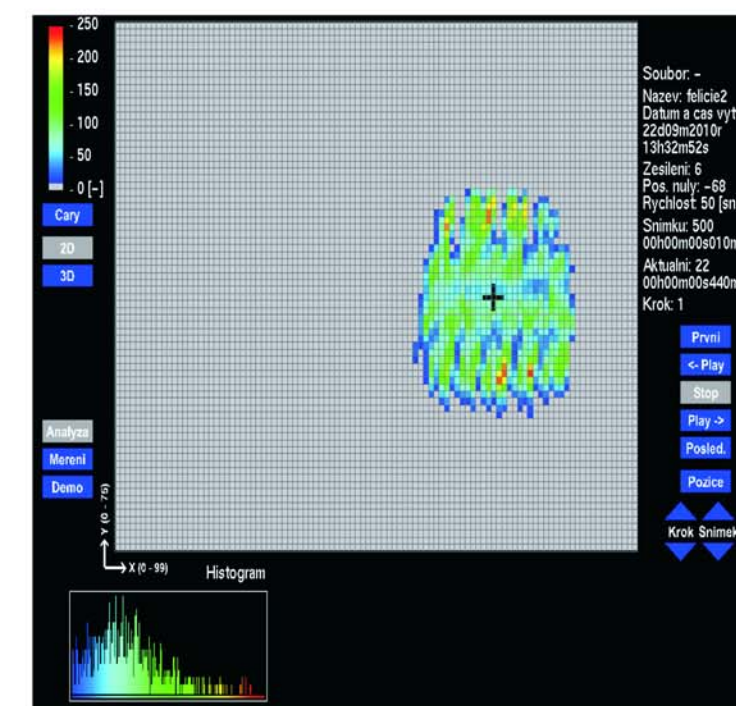
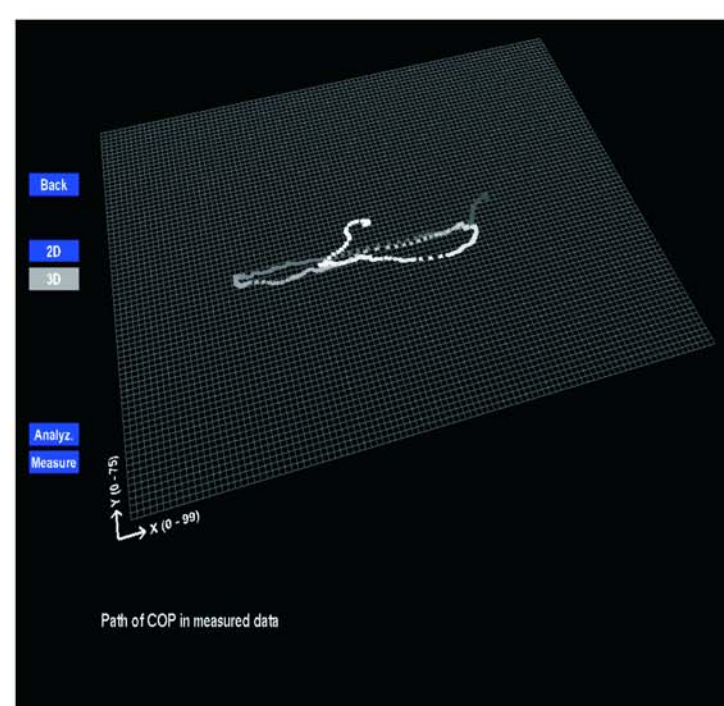
System modes

Continuous visualization. Shows actually pressure distribution on transducer. Data are direct transferred to PC. It is possible to be seen up to 50 snaps per second.

Accuracy measurement. Measured data aren't direct visualized, but data are saved in the HDD and later these ones are transferred to PC - to be visualized. Snaps number can be up to 300 snaps per second. Record time is 4 hours for 160 GB HDD. Data can be saved several times for their later storage on computer.

Technical parameters

Patient mass	to 120 kg
Rated pressure range	5 - 80 kPa
Permissible overload	1.4 Mpa
Transducer active area	400 x 300 mm
Transducer dimension	750 x 650 mm
Sensors number	7500 pcs
Sensor dimension	3x3 mm
Transducer supply voltages	+ 5V + 12 V
Transducer analogue output	to 1V
Digital output	256 levels
Snap frequency	300 Hz
Snaps number	60 snaps / 200 ms



Application facilities

- in medicine, e.g.: orthopaedics; rehabilitation; prosthesis and orthosis-development;
- for prevention of pathologic pressures on human body, thereby decubitus genesis, e.g. intelligent bed as biofeedback;
- for design of paraplegic sitting profiles etc.;
- for the anatomy sitting and leaning profiles design, especially in car and air-craft industry (by „crash-test“, air-back tests - being high demands on the dynamic mode of the transducer);
- in robotics (e.g.: for the stability and the robot-balancing point determination further for the grasp-force determination; the pattern recognition etc.);
- in any other industrial applications where is needed to know the pressure distribution on loaded area.

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Plantograf V09 was developed on University of Life Sciences in Prague and Czech Technical University in Prague.

Its price is 5 200 € + VAT.

Plantograf is used in workplaces of universities (Prague, Liberec), hospitals and rehabilitation clinic (Prague, Hradec Kralove, Slapy), sport workplaces (Prague), design workplace (Liberec) etc.

Awards:

Award of Year Innovation 1998 (1st award),
Plantograf V05 - Honorable mention Year Innovation 2005 (2nd award),
Plantograf V07 - 2009 Silver medal on International fair in Moscow, 2010
Gold medal of IFIA,
silver medal on International Fair IFNA in Nuremberg