## pliance **at a glance**

### ■ ftm analyser

| | |
|---|---|
| number of sensors (max.) | 12544 |
| offset and gain | programmable for each sensor |
| scanning speed | 10000 sensors / second |
| synchronisation in and out | TTL, selectable |
| analog input channels (max) | 21 |
| wireless interface | available |
| power supply | 12 V DC or 110 to 240 V AC |

### ■ ftm sensor mat (standard)

| | |
|---|---|
| technology | capacitive matrix sensor |
| number of sensors | 256 ~ 1344 |
| sensor resolution | 2.0, 2.5, 6.0 cm² / sensors |
| pressure range | 1 ~ 60 kPa |
| hysteresis | < 3 % FSO |
| temperature coefficient | 0.05 kPa x °C |
| elasticity | approx. 4 % |
| min.bending radius | 40 mm |

information subject to change without notice

pliance_ftm 11/06/2002_nirolaw

pliance systems offer the state of the art technology for pressure distribution measurement between soft and curved surfaces.

The system consists of a flexible and elastic measuring mat, a multi-channel analyser, a calibration device and a software package for PC´s.

The elastic measuring mats are available in various sizes, sensor configurations and pressure ranges.

The pliance-ftm analysers vary from small portable 16x16 channel units to large 112x112 channel units with a wide range of options, such as master-slave synchronisation of several systems, dynamic amplification control, synchronisation of video systems and analog inputs for accelerometers .

The patented trublu® calibration device can be used at any time to verify the quality of the measuring results. It works with homogeneous air pressure on all sensors through increasing steps of pressure. Thus an individual calibration curve for each sensor is calculated and used during data aquisition.

The software operates as a Windows application and contains many useful methods of data collection and scientific analysis of dynamic pressure distribution. It also allows continuous data storage in online mode and data handling with a configurable SQL database. The expert can design the parameter configuration to specific needs and exchange data with collegues via HTML proocol. As in all physical measuring

systems the most important part is the sensor technology. pliance works with capacitive transducers in a matrix configuration. The elasticity of the sensor mats permits perfect comformability to 3-dimensional deformations.

The pressure transducing elements contain high-tech elastomers manufactured by novel. Restoring force, range of force, threshold, hysteresis, temperature effect, frequency response and other characteristics are determined during the manufacturing process. This makes it possible to adapt the sensor characteristic to different measuring needs.
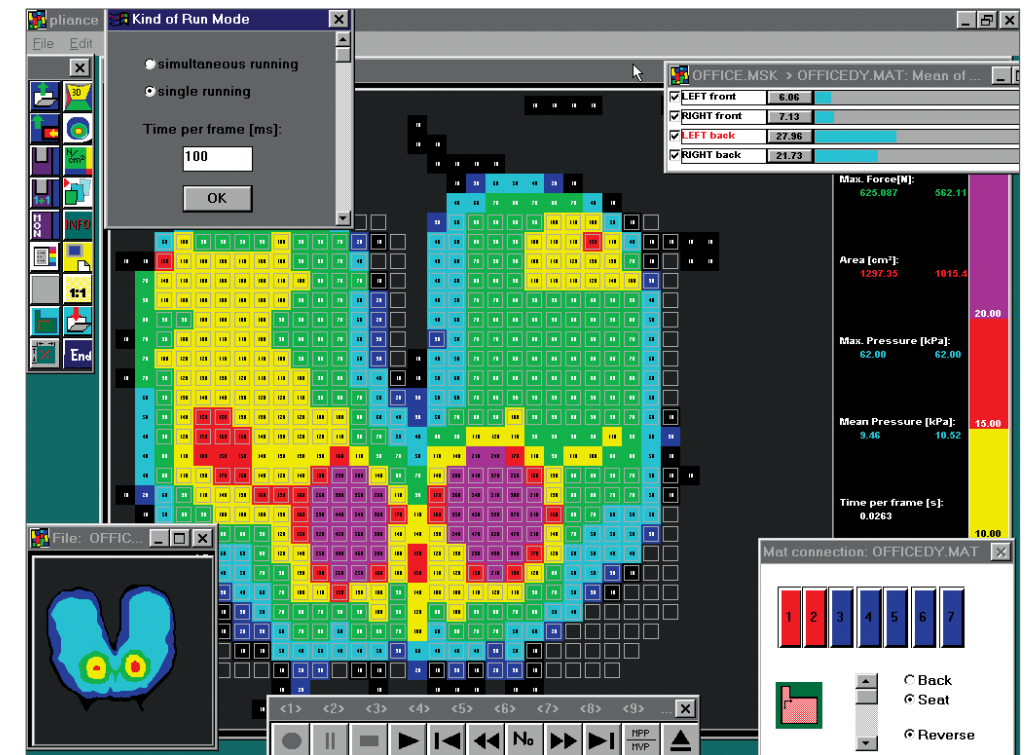

trublu® calibration device

novel developed an analyser technology that allows not only individual calibration curves for each sensor, but also individual dynamic amplification control and crosstalk suppression, resulting in very accurate and reproducible pressure values.
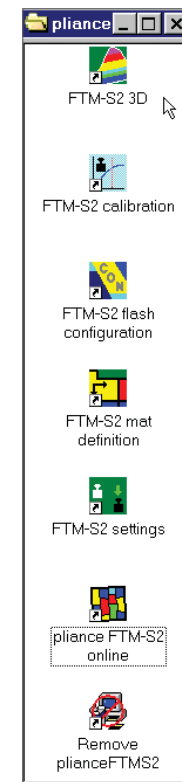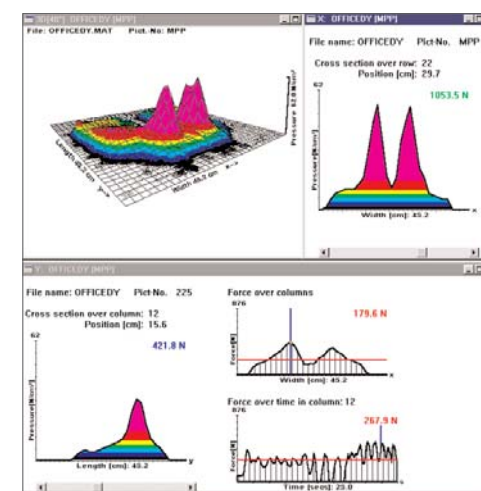
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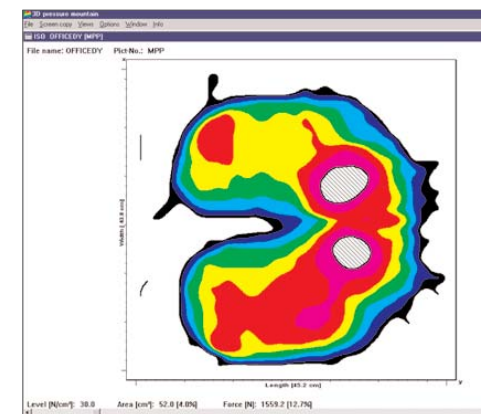

Online display for record and play


3 - D and x, y cross - section display


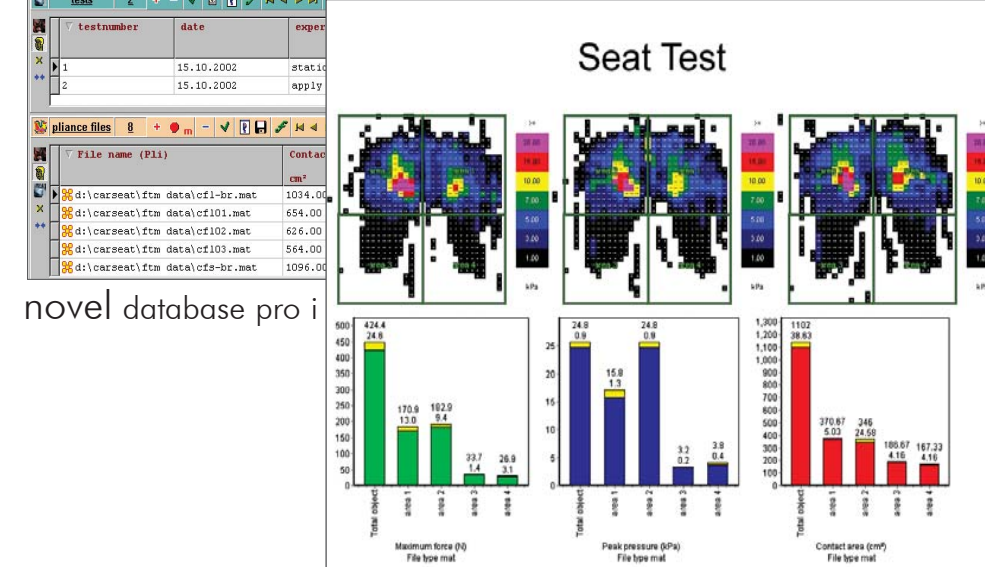novel database pro i


Isobar display with horizontal cross sections


Seat Test

novel report

novel