



Features of pliance®-s system

- can measure English and Western saddles
- adapts perfectly to horseback and saddle shape
- measures in static and dynamic mode
- stores data on a flash memory up to 30 min without computer
- collects accurate, calibrated values
- scans 60 frames per second
- records video synchronized
- includes telemetry
- works with Windows

Technical data of pliance®-s system

number of sensors	2 x 128
sensor mat thickness (mm)	2.6
measurement range (kPa)	1 - 60
measurement frequency (Hz)	60
dimensions of pliance box (mm)	150 x 100 x 40
weight (g)	360
storage type	32 MB internal flash
recording time to internal flash (min)	30
operating system	Windows
power supply	NiMH battery, 4.5 hours
computer interface	fiber optic/USB and Bluetooth™



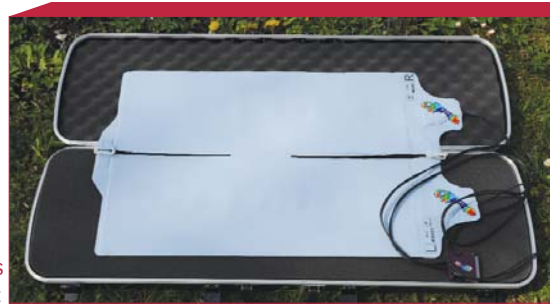
application of pliance®-s sensor mat



pliance®-s data acquisition unit



fixation of pliance®-s sensor mat



pliance®-s sensor mat



completion of pliance®-s sensor mat

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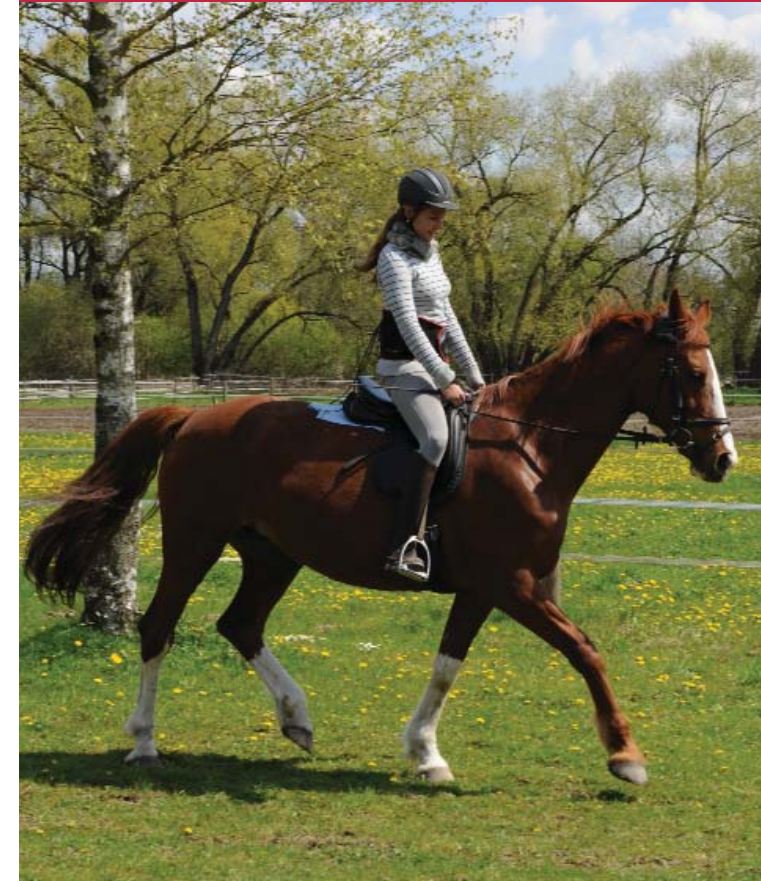
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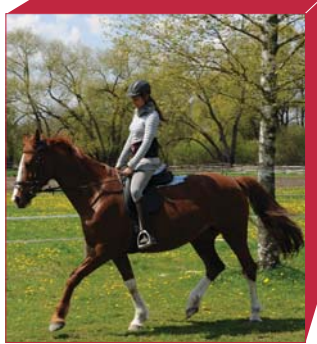
All systems from novel operate with high quality, calibrated sensors and provide reliable and reproducible long term measurements. pedograph®, emed®, pedar®, pliance®, triblu® and the novel logo (colored foot) are the registered trademarks of novel^{gmbh} © 1992-2008

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plianceSattelV2/June07/2008_nl

The **pliance®-s** system marks the beginning of a new era in the assessment of the dynamic interaction between the horse, the saddle and the rider.



How does the rider sit?
How does the saddle fit?
What does the horse feel?

pliance®-s measures the dynamic pressure distribution between the saddle and the horse using a thin elastic sensor mat.

It is possible to assess quantitatively the commands of the rider and the subsequent reaction of the horse. The technique of the rider can be objectively assessed and corrected. Data can be immediately viewed with easy to use software.

Using **pliance® recorder** software, the dynamic pressure distribution can be directly compared to synchronized video pictures.

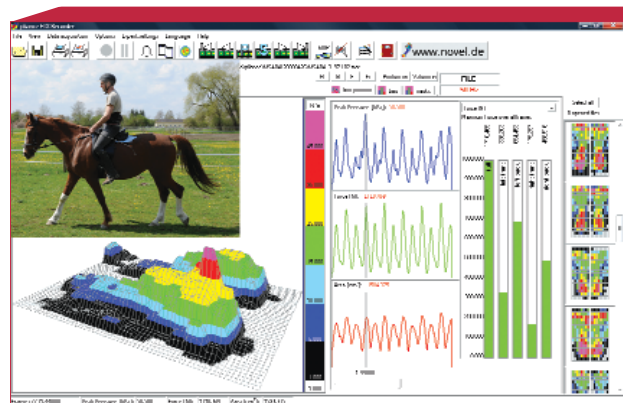
Harmful pressure points that arise from poor saddle fit can be recognized and corrected. During dynamic movement, such as trotting and galloping, substantially higher loads occur on the back and the shoulders of the horse as compared to

standing. The pressure distribution under the saddle during dynamic movement of the horse can be measured in order to assess the fit.

The **pliance®-s** sensor mat contains 2 x 128 sensors which are scanned with a scanning speed of 20,000 sensors per second. Dynamic measurements can be recorded for all paces, from the walk to the gallop.

Gait asymmetry of the horse, possibly associated with physiological back problems or poor saddle fit, can be assessed quantitatively.

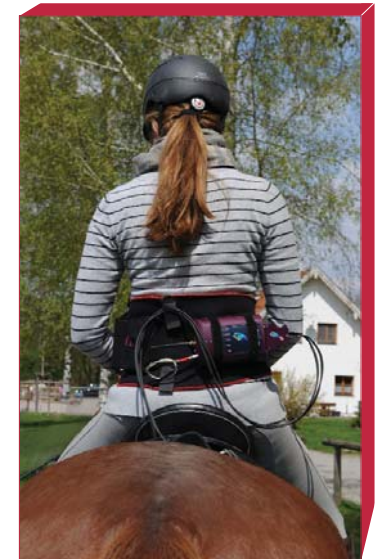
The **pliance®-s** system is accurate and reliable. The sensor mat is calibrated in a simple, computer-aided procedure which calculates the calibration curves for each individual sensor. The calibration remains stable with time.



PC screen

The **pliance®-s** software operates as a Windows application and displays dynamic pressure distribution on screen as a 2D or 3D color picture. The pictures can be printed in their original size to allow the user to relate the pressures precisely to the horse's anatomical landmarks or to the saddle. All data are fully compatible with **novel** scientific software packages and can also be exported in ASCII format.

With the help of the **pliance®-s** system and its powerful software one can analyse the quality of the saddle and obtain a better understanding of the interaction between the rider, the saddle and the horse.



pliance®-s system in use

