

# SURFACE PRESSURE MAPPING

## Using Science to Achieve the Best Saddle Fit



### A Perfect Fit Ensures Comfort and Safety for Horse and Rider

The new Tactilus Equestrics® sensor is a capable alternative to saddle-buying and fitting by trial and error, hit or miss.

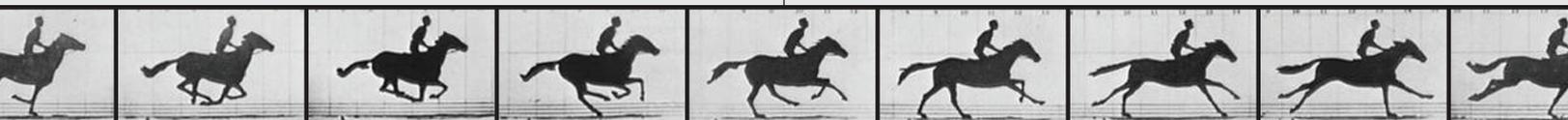
A by-product of years of medical product development for wheelchair users, the Equestrics® sensor is the product of extensive scientific research coupled with the latest technology in surface pressure mapping and algorithm development.

Using the Equestrics® sensor system allows you to quickly evaluate a horse's back for symmetry and potential sore spots, and help determine the most suitable saddle tree type, tree width, panel shape and depth for his back.

### An Economical, Easy-to-use, and Accurate System

The benefits of using the Tactilus Equestrics® sensor include:

- Scientifically accurate and precise data for developing the best saddle-fit
- An easy-to-use system that includes everything you need to fit saddles to practically any horse, any rider
- Real-time feedback about pressure points at any location in the contact region
- Cost-effective and reliable system operation
- Wireless capability
- Also available in stretchable fabric



## SENSOR ELEMENT AND ELECTRONIC COMPONENTS



*The Tactilus Equestrics® sensor system is the most economical, scientific and user-friendly system for surface pressure mapping available today, both in the lab and in the field.*

### How it Works

The Tactilus Equestrics® sensor is a matrix-based tactile surface sensor that works by the principle of piezoresistance. Tiny sensing cells cover the entire surface area of the sensor “skin” allowing for discrete spot pressure analysis at any point in the contact region. The Tactilus Equestrics® sensor provides real-time data showing precisely where the pressure points occurs between the saddle and the horse.

### About the System

The Tactilus Equestrics® sensor system includes the following components:

- A piezoresistance matrix sensor mat that is placed underneath the saddle on the back of the horse. Tiny sensing cells cover the entire mat and perform discrete pressure analysis of every point in the contact region.
- An electronic hub that connects the sensor to the computer system.
- Interconnection cabling.
- Power supply.
- Analytical system.
- Wireless capability.
- Also available in stretchable fabric.

### PHYSICAL SPECIFICATIONS

Technology	Piezoresistive
Pressure Range	0 - 5 PSI (0 - 0.352 kg/cm <sup>2</sup> )
Grid Size	26 x 31 split mat
Active Sensing Points	779
Total Sensing Area	29.5 x 35 in. (75 x 89 cm)
Scan Speed	Up to 10 hertz
Thickness	98.4 mils (2.5 mm)
Accuracy	± 10%
Wireless	30 ft. (9.14 m) range

### Our commitment

Customers will not only leave with the assurance of a scientifically validated saddle purchase decision but both the rider and horse stand to benefit by improved comfort and performance.