



The standard in Ergometry

Excalibur Sport PFM

Smarter, better, and stronger, including precise Pedal Force Measurement (PFM) seamlessly blending innovation to meet the evolving demands of modern sports medicine and research.

Smarter, Better, Stronger

With unmatched accuracy and reliability, the Excalibur Sport has long been recognized as the Gold Standard in Ergometry since 1985. Now, with the integration of Pedal Force Measurement (PFM), the Excalibur Sport enters a new era of performance diagnostics.

PFM technology enables real-time measurement of pedal forces using high-precision strain gauges and angular sensors. This allows for advanced biomechanical analysis of left-right power balance, force direction, and total workload – all with medical-grade accuracy. Let your athletes become even stronger, better, and smarter – powered by cutting-edge ergometry and biomechanics technology.

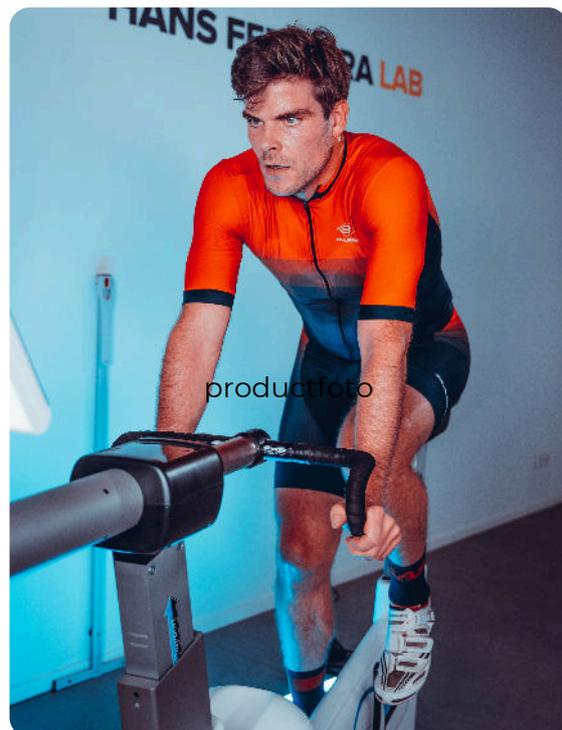
Statements users

“We have a lot of skaters who are active on high levels and the Excalibur sport is perfect for them”
Mirjam Steunebrink - SMA Martini

Suitable for all types of athletes

The Lode Excalibur Sport ergometer is an essential part of a sports medicine or research lab and can be used to test all types of athletes. The ergometer allows for various tests, such as:

- Wingate Sprint Test
- Isokinetic Tests
- High Intensity Tests (HIT)
- Time Trials
- Cardiopulmonary Exercise Tests
- Left-Right Pedal Force Assessment





Why the Excalibur Sport PFM

The Gold Standard in Ergometry

With over 1500 installations worldwide, the Excalibur Sport ergometer is considered as the Gold Standard in Ergometry worldwide. The ergometer can be found in most of the top 20 sport science schools and departments (Shanghai Ranking of Global Ranking of Sport Science schools and departments).

Extreme workload range of 10 - 3000 watt

This extraordinary peak workload is extremely suitable for sports medicine and testing the strongest athletes on their anaerobic power or isokinetic capacity. Combined with the low start workload of 10 Watt this ergometer will fit everybody.

Get the perfect fit with electric adjustment of the saddle and handlebar

The position of the saddle of the Excalibur Sport can be adjusted in height, length and angle to suit all users. The position of the handlebar of the Excalibur Sport is completely adjustable in height and length.

PFM Measurement at 1000 Hz

The accuracy of the PFM is obtained by the high frequency of data collection at 1000 Hz in combination with highly specific strain gauges in the crank axis.

Left and right independent measurements

The PFM is not only the summation of left and right, but real left and right independent measurements. Differences between the left and right pedal movement, before and after surgery or at different workload can be detected. A real diagnostic tool!

LEM PFM included

The LEM software with PFM module is standard included.

Compatible with ECG and pulmonary devices

The Excalibur Sport can be controlled easily by all known stress ECG and pulmonary devices available in the world.

