The new Excalibur Sport
Smarter, Better, Stronger!

Highlights

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 Excalibur will fit everybody.

Suitable for all types of athletes
The ergometer can be used for various tests, like e.g. Wingate, Isokinetic, HIT and timetrials. Moreover CPET testing and bike fitting is possible, allowing all types of athletes to be tested.

Extreme adjustability
Both the saddle and the handlebar can be adjusted horizontally and vertically using the control unit.

Exchangeable accessories
The pedals, handlebar and saddle can easily be exchanged for the Test Subjects own accessories to test the Test Subject as realistic as possible, to optimize the circumstances or exchange to test a better bike fitting.

Heavy Duty Design
The Excalibur Sport is designed for heavy duty sports medicine ergometry, without doing any concession on the esthetic, modern and robust design. In other words: Excalibur Sport: the gold standard in Ergometry!
With its unbeatable accuracy and reliability, the Excalibur Sport has proven itself as The Gold Standard in Ergometry ever since 1985. However, the world keeps spinning and developments never stop. That is why we now proudly present the new Lode Excalibur Sport: Smarter, Better and Stronger! Still true to its heritage but combined with innovative new features to meet the latest and future requirements of modern sports medicine and research to allow athletes to become stronger and better with smarter use of human performance technology.

Versatile ergometer

The new Lode Excalibur Sport ergometer is an essential part of a sports medicine or research lab, since it can be used to test all types of athletes. The ergometer allows for various tests, like a Wingate sprint test, Isokinetic tests, High Intensity Tests (HIT) and time trials. Moreover, it can also be used for CPET testing and bike fitting.
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Features

**Electric adjustable saddle Excalibur Sport**
The position of the saddle of the excalibur sport can be adjusted in height, length and angle to suit all users.

The saddle of the ergometer can be adjusted horizontally in a range of 252 mm and the saddle height in a range of 388 mm using the Control Unit or LEM.

The Test Subject can be seated on the saddle while adjusting.

**Electric adjustable handlebar Excalibur Sport**
The position of the handlebar of Excalibur Sport is completely adjustable in height and length.

The handlebar of the ergometer can be adjusted horizontally in a range of 169mm and vertically in a range of 390mm using the Control Unit or LEM software. The Test Subject can use the handlebar while adjusting.

**Extreme low start up load 10W**
The extreme low start-up load of 10 watts and the adjustability in small steps of 1 watt make this ergometer perfectly suitable for many different applications. The standard control unit shows multiple ergometry parameters and you can determine your specific default setting and start-up menu.

**Low noise**
Due to accurate manufacturing and the careful choice of materials the product has an extremely low noise level.

**Accurate over a long period of time**
The Lode ergometers are supplied with an electro-magnetic braking mechanism of Lanooy (eddy current). The biggest advantage of this braking system compared to a friction braking system is the absolute accuracy and the accuracy over time. Moreover, friction braking systems have more wearing parts.

**Compatible with ECG and pulmonary devices**
The Lode ergometers have digital interfaces and can be controlled easily by all known stress ECG and pulmonary devices available in the world. This is one of the reasons why the Lode ergometers are very popular worldwide.

**Exchangeable pedals**
The cranks of the ergometer are suitable for almost all available clip systems so cyclists can perform a test with their own favorite pedals.

**Designed to be sweat-proof**
The housing of the ergometer is designed in such way that sweat does not have the chance to drip into the mechanical parts and cables are protected. This ensures a long lifetime and makes the ergometer insensitive for malfunction.

**RS232 connectivity**
RS232 ports enable connectivity to most ECG and ergospirometry devices as well as PC’s.

**LEM compatible**
This product can be used with Lode Ergometry Manager (LEM) software to manage data and to apply specific protocols when a Communication card or Network card is present.
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The new Excalibur Sport can a.o be extended with the following options:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Partnumber</th>
</tr>
</thead>
<tbody>
<tr>
<td>USB to Serial converter</td>
<td>Easy connection</td>
<td>226012</td>
</tr>
<tr>
<td>Adjustable sports cranks incl. pediatric range</td>
<td>Optimal force application</td>
<td>925808</td>
</tr>
<tr>
<td>Easy saddle exchange option</td>
<td>Fast change of saddle to suit all users</td>
<td>925807</td>
</tr>
<tr>
<td>SpO2 for control unit with touch panel (extra long cable)</td>
<td>Oxygen saturation</td>
<td>945822</td>
</tr>
<tr>
<td>0-Watt start-up system</td>
<td>Lowest possible startup power</td>
<td>960805</td>
</tr>
<tr>
<td>Ambient sensor pack</td>
<td>Check environmental conditions during test</td>
<td>945827</td>
</tr>
<tr>
<td>Blood Pressure with ECG trigger for bicycle ergometer</td>
<td>with ECG trigger</td>
<td>945828</td>
</tr>
<tr>
<td>Saddle for children - ordered additionally</td>
<td>Versatile ergometry</td>
<td>P401066</td>
</tr>
<tr>
<td>Bluetooth Smart heart rate</td>
<td>Heartrate available within an extreme wide</td>
<td>945833</td>
</tr>
</tbody>
</table>
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Specifications

Workload
- Minimum load: 10 W
- Maximum peak load: 3000 W
- Isokinetic workload control
- Minimum load increments: 1 W
- Hyperbolic workload control
- Linear workload control
- Fixed torque workload control
- Maximum rpm independent constant load: 180 rpm
- Minimum rpm independent constant load: 30 rpm
- Electromagnetic “eddy current” braking system

Accuracy
- Workload accuracy below 100 W: 2 W
- Workload accuracy from 100 to 1500 W: 2%
- Workload accuracy over 1500 W: 5%

Comfort
- Toeclips on pedals
- Q-factor: 147 mm
- Vertical seat adjustment maximum: 938 mm (36.9 inch)
- Vertical seat adjustment minimum: 550 mm (21.7 inch)
- Horizontal seat adjustment minimum: 72 mm (2.8 inch)
- Horizontal seat adjustment maximum: 324 mm (12.8 inch)
- Allowed user weight: 225 kg (496 lbs)
- Horizontal handlebar adjustment minimum: 229 mm (9 inch)
- Horizontal handlebar adjustment maximum: 60 mm (2.4 inch)
- Vertical handlebar adjustment minimum: 465 mm (18.3 inch)
- Vertical handlebar adjustment maximum: 855 mm (33.7 inch)

User Interface
- English user interface
- Norwegian user interface
- Czech user interface
- Danish user interface
- Dutch user interface
- French user interface
- German user interface
- Italian user interface
- Japanese user interface
- Korean user interface
- Polish user interface
- Portuguese user interface
- Russian user interface
- Spanish user interface
- Turkish user interface
- Ukrainian user interface
- Terminal operation mode

Screen size (diagonal): 17.8 cm (7 inch)
Touchscreen

Connectivity
- Lode interface protocol
- Ergoline P10 interface protocol
- Ergoline P4 interface protocol
- Schiller interface protocol
- Bosch EKG 506 DS interface protocol
- USB connector
- RS232 out connector

Dimensions
- Product length (cm): 200 cm (78.7 inch)
- Product width (cm): 100 cm (39.4 inch)
- Product height: 70 cm (27.6 inch)
- Product weight: 145 kg (319.7 lbs)

Power requirements
- 100 / 230V AC 50/60 Hz
- V AC: 100 - 240 V
- Phases: 1
- Frequency: 50/60 Hz
- Power consumption: 160 W
- Power cord length: 250 cm (98.4 inch)
- Power cord IEC 60320 C13 with CEE 7/7 plug

Standards & Safety
- IEC 60601-1:2012 - pending
- ISO 13485:2016 compliant
- ISO 9001:2015 compliant


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For Life | Understanding Movement & Performance
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Order info
Partnumber: 965910

*Specifications are subject to change without notice.