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!

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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.

This ergometer is standard supplied with a 7" control unit and a USB A-B cable to connect to cpet devices.

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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 is present

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SMARTER - The future is now
Adjustment of both the seat and the handlebar is possible in both a horizontal and vertical range. This adjustability can be controlled electrically through the display of the bike or LEM software, enabling easy optimization of the seating position. Moreover, the seat, handlebar and pedals can be exchanged easily for total adaption to the body posture and bike-fitting of each individual athlete.

You can extend the new Lode Excalibur Sport with the Lode Ergometry Manager Software, for faster availability of data and to simplify tha analysis of the tests. The latest Lode electrics makes the ergometer ready for the future.

BETTER - It's all about the details
The adjustability range of the New Excalibur Sport has improved considerably, making it possible for even more athletes to use the bike. The new touchscreen offers an easy user interface. You can determine yourself what data is made visible.
Furthermore, blood pressure measurement and SpO2 are available.

STRONGER - No sweat, no glory
The new Lode Excalibur Sport offers the highest performance testing with an unimaginable maximum peak load of 3000 watt! This load is fully supported by the new indestructible and sweat proof design. The bike is extrenely stable and cables are protected against sweat.

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The new Excalibur Sport can a.o be extended with the following options:

USB to Serial converter

Easy connection

Partnumber: 226012

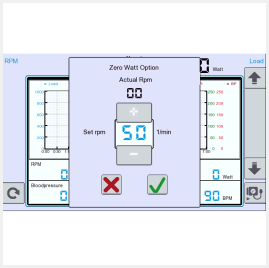
SpO2 for control unit with touch panel (extra long cable)

Oxygen saturation

Partnumber: 945822

0-Watt start-up system

Lowest possible startup power



Partnumber: 960805

Colour Display 3.5" - 2nd screen

Multifunctionality

Partnumber: 945819

RS232 cable

Easy connection

Partnumber: 930911

Network module connection cable

Easy connection

Partnumber: 930930

Add program function to 7" touch screen for ergometer

Easily programmable

Partnumber: U945835

Blood Pressure with ECG trigger for bicycle ergometer

with ECG trigger

Partnumber: 945828

Saddle for children

Versatile ergometry

Partnumber: 401066

Saddle for children - ordered additionally

Versatile ergometry

Partnumber: P401066

Remote Control for ergometers

Ease of use

Partnumber: 945832

Bluetooth Smart heart rate

Heartrate available within an extreme wide

Partnumber: 945833

Packaging upgrade to wooden box

Ultra heavy duty packaging

Partnumber: U501155W

Ambient sensor pack

Check environmental conditions during test

Partnumber: 945856

Adjustable sports cranks incl. pediatric range

Optimal force application, allows for

Partnumber: 925818

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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 1500 - 3000 W	5 %	

Comfort

Toeclips on pedals	✓	
Q-factor	147 mm	
Minimum leg length user	737 mm	29 inch
Minimum leg length user (incl. adjustable pedals)	662 mm	26.1 inch
Maximum leg length user	1128 mm	
Max. leg length user (incl. adjustable pedals)	1143 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	600 mm	23.6 inch
Vertical handlebar adjustment minimum	465 mm	18.3 inch
Vertical handlebar adjustment maximum	855 mm	33.7 inch

User Interface

English user interface	✓	
Chinese user interface	✓	
Croatian user interface	✓	
Czech user interface	✓	
Danish user interface	✓	
Dutch user interface	✓	
Finnish user interface	✓	
French user interface	✓	
German user interface	✓	
Greek user interface	✓	
Hungarian user interface	✓	
Italian user interface	✓	
Japanese user interface	✓	
Korean user interface	✓	
Latvian user interface	✓	
Lithuanian user interface	✓	
Norwegian user interface	✓	
Polish user interface	✓	
Portugese user interface	✓	
Romanian user interface	✓	
Russian user interface	✓	
Spanish user interface	✓	
Swedish user interface	✓	
Turkish user interface	✓	
Ukrainian user interface	✓	
Terminal operation mode	✓	
Screen size (diagonal)	17.8 cm	7 inch
Touchscreen	✓	

Connectivity

Control Unit with touch screen 7" for ergometer	✓	
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	✓	

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Dimensions

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

Power requirements

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	✔
ISO 13485:2016 compliant	✔
ISO 9001:2015 compliant	✔

Order info

Partnumber:	965910

**Specifications are subject to change without notice.*

Lode B.V.
Zernikepark 16
9747 AN Groningen
The Netherlands
Tel: +31 50 5712811
Fax: +31 50 5716746
E-mail: ask@lode.nl
Internet: www.lode.nl