

# Corival cpet

Can be controlled by all known Cardio Pulmonary Exercise devices



## Highlights

### Reliable and reproducible stress tests

The experience of professionals who calibrate many ergometers showed that the Lode ergometers are the most reliable across the complete workload and rpm range and still within specifications even after many years of intensive use.

### High standards

Lode is a socially and environmentally responsible company. All Lode products are RoHS/WEE compliant and Lode is ISO 9001:2015, and ISO 13485:2016 certified. All medical products comply to MDD 93/42/EEC, incl. IEC 60601-1.

### Various test modes

Besides the hyperbolic (rpm-independent) mode that is used most of the time, the standard control unit offers several other test modes, like the fixed torque mode and the linear mode. These modes can be used in both manual and terminal mode.

### Q-factor equal to road-bike

The Q-factor of the ergometer is equal to the Q-factor of road bikes, creating perfect training circumstances.

### Rotatable handlebar with new lever

The new designed lever makes it even easier to adjust the handlebar. The handlebar can be rotated 360 degrees and is constructed in such a way that the test subject can be installed comfortably at every seating height.



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The Corival is one of the most popular ergometers worldwide. The low start-up load of 7 Watt is first-class. The Corival cpet is standard supplied with a communication module and can therefore be easily controlled by all known stress ECG and pulmonary devices in the world. The workload, rpm and time can be readout from the 3,5" colour display. The Corival has an eddy current electro-magnetic braking mechanism. The biggest advantage of this system is the accuracy which is one of the most important Lode principles. With this ergometer, the stress tests performed are reliable and reproducible. The workload is adjustable in a range of 7 to 1000 watt. The ultralow step-through enables easy access to the ergometer and the latest design guarantees a perfect ergonomic position. Moreover, the noise level is reduced to a minimum.

## Features



### 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.

**7  
watt**

### Extreme low start up load

The extreme low start-up load of 7 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.



### RS232 connectivity

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



### Readout out of saddle height

The height of the saddle is stepless adjustable and can be read-out on the saddle shaft



### Perfect ergonomic position

Improved ergonomic position according to the latest requirements.



### Ultra-low step-through

The lowest possible step-through guarantees easy access to the ergometer for all test subjects: a must for people who are not so mobile!



### Hidden connectors

The cables are connected to the ergometer under the ergometer, which means that the test subject or operator cannot bump onto the connector.



### USB connectivity







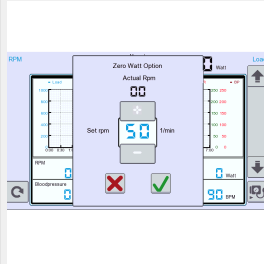
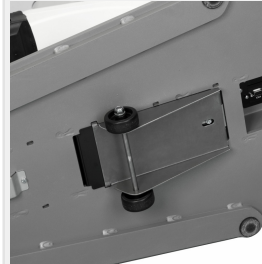





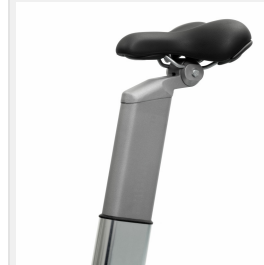

USB to connect to PC or ECG or ergospirometry products facilitates easy connectivity.

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Corival cpet can a.o be extended with the following options:

<p><b>Pedal shoes (pair)</b></p> <p>Extra stability during cycling</p>  <p>Partnumber: 917803</p>	<p><b>Pedal shoes pediatric (pair)</b></p> <p>Pedal shoes for children</p>  <p>Partnumber: 917833</p>	<p><b>Pedal shoes extra large (pair)</b></p> <p>For large feet sizes</p>  <p>Partnumber: 917834</p>	<p><b>Adjustable cranks</b></p> <p>Optimal force application</p>  <p>Partnumber: 928804</p>	<p><b>USB to Serial converter</b></p> <p>Easy connection</p>  <p>Partnumber: 226012</p>
<p><b>Arm support</b></p> <p>Arterial line possible</p>  <p>Partnumber: 906814</p>	<p><b>0-Watt start-up system</b></p> <p>Lowest possible startup power</p>  <p>Partnumber: 960805</p>	<p><b>Transportwheel for Corival</b></p> <p>Easy transportation indoors</p>  <p>Partnumber: 960801</p>	<p><b>RS232 cable</b></p> <p>Easy connection</p>  <p>Partnumber: 930911</p>	<p><b>Control Unit with 7" touch screen for ergometer</b></p> <p>Multifunctionality</p>  <p>Partnumber: 945834</p>
<p><b>Programmable Control Unit with 7" Touchscreen for Ergometer</b></p>  <p>Partnumber: 945835</p>	<p><b>SpO2 for control unit with touch panel (bicycle)</b></p> <p>Saturation and heart rate</p>  <p>Partnumber: 945823</p>	<p><b>SpO2 for control unit with touch panel - ordered afterwards</b></p> <p>Ordered afterwards</p>  <p>Partnumber: P945823</p>	<p><b>Electric adjustable saddle height</b></p> <p>Easy and accurate positioning</p>  <p>Partnumber: 960810</p>	<p><b>Control Unit with touch screen 7" - ordered additionally</b></p> <p>Multifunctionality</p>  <p>Partnumber: P945834</p>

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## Specifications

### Workload

Workload range fixed torque	0,1 - 70 Nm
Minimum load	7 W
Maximum peak load	1000 W
Minimum load increments	1 W
Maximum continuous load	750 W
Hyperbolic workload control	✓
Linear workload control	✓
Fixed torque workload control	✓
Maximum rpm independent constant load	150 rpm
Minimum rpm independent constant load	30 rpm
Optional heart rate controlled workload	✓
Electromagnetic "eddy current" braking system	✓
Dynamic calibration	✓
Power range at maximum rpm (maximum)	1000 W

### Accuracy

Workload accuracy below 100 W	3 W
Workload accuracy from 100 to 500 W	3 %
Workload accuracy from 500 to 1000 W	5 %

### Comfort

Q-factor	180 mm	
Minimum leg length user	645 mm	25.4 inch
Minimum leg length user (incl. adjustable pedals)	602 mm	23.7 inch
Allowed user weight	180 kg	396.8 lbs
Handlebar adjustment angle	360 °	
Adjustability range seat	300 mm	11.8 inch

### User Interface

English user interface	✓	
Norwegian user interface	✓	
Czech user interface	✓	
Danish user interface	✓	
Dutch user interface	✓	
Finnish 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	✓	
Readout RPM	✓	
Readout Time	✓	
Readout Power	✓	
Set Resistance	✓	
Terminal operation mode	✓	
Screen size (diagonal)	8.9 cm	3.5 inch
Touchscreen	✓	
<b>Connectivity</b>		
Lode 38K4 interface protocol	✓	
Lode interface protocol	✓	
Lode WLP interface protocol	✓	
Ergoline P10 interface protocol	✓	
Ergoline P4 interface protocol	✓	
Schiller interface protocol	✓	
Bosch EKG 506 DS interface protocol	✓	
USB connector	✓	
RS232 in connector	✓	

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## Dimensions

Screen resolution	320 x 240 pixels	
Product length (cm)	105 cm	41.3 inch
Product width (cm)	46 cm	18.1 inch
Product height	114 cm	44.9 inch
Product weight	65 kg	143.3 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	✓	
Power cord NEMA	✗	

## Standards & Safety

IEC 60601-1:2012	✓
ISO 13485:2016 compliant	✓
ISO 9001:2015 compliant	✓

## Certification

CE class Im according to MDD93/42/EEC	✓
CE class of product with optional SpO2	Ila
CE class of product with optional BPM	Ila
CB according to IEC60950-1	✓

## Order info

Partnumber: 960900

*\*Specifications are subject to change without notice.*