Corival Pediatric

Easy accessible and approachable for children

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.

Rotatable handlebar

The handlebar can be rotated 360 degrees and is constructed in such a way that the test subject can sit comfortably at every seating height. This design makes a height-adjustable handlebar redundant.

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.

Multifunctional

The ergometer can be used in various ergometry settings, enabling a multifunctional deployment.

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The special design of the Corival Pediatric guarantees easy access and ergometry testing of children. The ergometer is standard supplied with a communication module and can therefor be easily controlled by all known stress ECG and pulmonary devices in the world. The workload, rpm and time can be readout from the 7" 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.

A USB A-B cable for service purposes as well as connecting to ECG and pulmonary testing devices will be standard delivered with the product.To connect older ECG and pulmonary testing devices with RS232 or other connectors you need a special interface cable that can be ordered separately.

Features

Child friendly design

The special design of this ergometer makes it easy accessible and approachable for children.

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.

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.

Small adjustment steps

The workload of the Lode ergometers is adjustable in steps of only 1 watt. Depending on your wishes, the test operator or the test subject can adjust the workload. The steps of 1 watt are possible in the manual mode as well as within protocols.

Service friendly ergometer

Lode ergometers are very service friendly. In general, total costs for spare parts are so low that they are negligible. Furthermore, most options are so easy to install and firmware is so easy to update that labor costs are minimal. Moreover, the ergometer can be cleaned easily.

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

Pedal shoes pediatric (pair)

Pedal shoes for childen

Partnumber: 917833

USB to Serial converter

Easy connection

Partnumber: 226012

Arm support

Arterial line possible

Partnumber: 906814

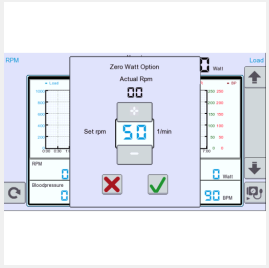
Network Module

Easy networking with LEM and LCRM

Partnumber: 945851

0-Watt start-up system

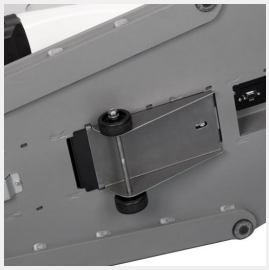
Lowest possible startup power



Partnumber: 960805

Transportwheel for Corival

Easy transportation indoors



Partnumber: 960801

RS232 cable

Easy connection

Partnumber: 930911

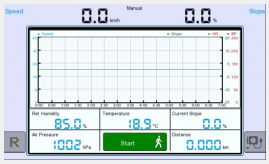
Add program function to 7" touch screen for ergometer

Easily programmable

Partnumber: U945835

Ambient sensor pack

Check environmental conditions during test



Partnumber: 945827

Easy saddle exchange option - Corival

Fast change of saddle to suit all users

Partnumber: 960807

Remote Control for ergometers

Ease of use

Partnumber: 945832

Blood Pressure with ECG trigger for pediatric bicycle ergometer

with ECG-trigger

Partnumber: 945836

SpO2 for control unit with touch panel (pediatric bicycle)

Saturation and heart rate

Partnumber: 945837

Bluetooth Smart heart rate

Heartrate available within an extreme wide

Partnumber: 945833

Packaging upgrade to wooden box

Ultra heavy duty packaging

Partnumber: U501032W

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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

Minimum leg length user	510 mm	20.1 inch
Minimum leg length user (incl. adjustable pedals)	459 mm	18.1 inch
Allowed user weight	180 kg	396.8 lbs
Handlebar adjustment angle	360 °	

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	✓
Readout Distance	✓
Readout RPM	✓
Readout Heartrate	✓
Readout target HR	✓
Readout Energy	✓
Readout Torque	✓
Readout Time	✓
Readout Power	✓
Set Display	✓
Set Resistance	✓
Set P-Slope	✓
Set Mode	✓
Manual operation mode	✓
Preset protocol operation mode	✓
Terminal operation mode	✓
Selfdesigned protocol operation mode	✓

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Dimensions

Screen resolution	800 x 480 pixels	
Product length (cm)	105 cm	41.3 inch
Product width (cm)	58 cm	22.8 inch
Product height	98 cm	38.6 inch
Product weight	58 kg	127.9 lbs

Power requirements

V AC	100-240V V
Phases	1
Frequency	50/60 Hz
Power consumption	160 W
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	IIa
CE class of product with optional BPM	IIa
CB according to IECEE CB	✓

Order info

Partnumber:	960903

**Specifications are subject to change without notice.*

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