# VALIANT



the standard in Ergometry

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Rehabilitation / Physiotherapy

Sports Medicine

Cardiology

Pulmonary function

Lode has been developing and manufacturing ergometers for over 50 years in accordance with Lode's three fundamental principles: accuracy, reliability and durability. Lode has a complete product range offering all solutions in the field of bicycle, recumbent, treadmill, arm and imaging ergometry! The Valiant is a modern and reliable treadmill that can be controlled both manually and by external equipment.

### • Lode the standard in Ergometry

Ever since Mr Fré Lode manufactured the first electro-magnetic cycle ergometer in 1952, accuracy, reliability and durability have been fundamental for further developments. Having started years ago in the small market of cardiology and pulmonary function, Lode BV has become the specialist in the complete spectrum of medical ergometry. Lode is world renowned as a manufacturer of high quality ergometers and the Lode brand stands for accuracy, durability and ergonomic design. The Lode product range varies from bicycle ergometers and treadmills to recumbent, arm and supine ergometers and ergometry software.

Long-term experience in manufacturing medical equipment and continuous development to meet the changing requirements of the market make Lode a flexible and reliable partner. Together we can transform your specific ideas and wishes into custommade products.

Before leaving the factory all Lode ergometers are dynamically calibrated and, of course, all units are produced under the strictest quality control conditions. Lode is ISO 9001:2000, ISO 13485:2003 and FDA certified and fulfils the EU Medical Device Directive MDD 93/42/EEC. Over years of use, service costs are almost negligible. In other words: Lode, *the* standard in Ergometry.

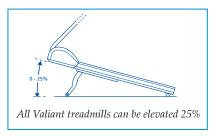


Valiant Rehab with optional adjustable side handrails

The control unit of the Valiant offers programming possibilities for speed, angle and standard tests like Bruce and Balke. With the heart rate option it is possible to program several heart rate controlled protocols. The low step-up height makes the treadmill perfectly suitable for all test subjects in the field of cardiology, rehabilitation and pulmonary function.

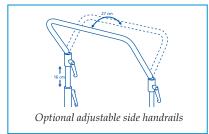
#### **Valiant**

The Valiant offers a smooth acceleration from 0 km/h and is continuously adjustable in a range of 0.5 - 20 km/h (0.3 - 12 mph). The treadmill can be controlled with the control unit or by external equipment. Together with the elevation of 0-25%, this treadmill is the solution for use in cardiology, pulmonary function and physiotherapy settings.



#### **Valiant Rehab**

This treadmill offers a smooth acceleration from 0 km/h and is continuously adjustable in a range of 0.1-12 km/h (0.1-7.5 mph) and can be combined with the adjustable side handrails. These handrails are adjustable in height (791-954 mm) and width (440-975 mm). Pediatric front and side handrails are also available. These features together with the



optional heart rate controlled protocols make this treadmill perfectly suitable for rehabilitation purposes. With the optional reclining entrance plate the access to the treadmill is even easier! The treadmill can be controlled with the control unit or by external equipment.

## **Valiant Plus**

The Valiant Plus has an extended running surface of  $170 \times 60$  cm and the speed range is adjustable from 1-25 km/h (0.6-15.6 mph). The speed has a smooth acceleration from 0 km/h and is continuously adjustable in steps of 0.1 km/h. This treadmill is especially suitable for sports medicine settings and can be controlled with the control unit or by external equipment.

# **Valiant Special**

Special treadmills with extraordinary dimensions for e.g. wheelchairs or roller-skates are also available. It is possible to provide a wider or longer running surface, a higher maximum speed, etc.

A special model of the Valiant treadmill without control unit is also available. This model can be controlled by external equipment.

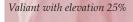
Please contact Lode for a solution if you need a treadmill with specific specifications.

# **Features**

- The Valiant treadmill has a modern and stable design;
- The extreme low step-up height guarantees easy access for all test subjects;
- Zero starting speed: a smooth acceleration from 0 km/h;
- Speed adjustment in the range of 0.5 20 km/h (0.3 12 mph) for the Valiant;
- Speed adjustment in the range of 0.1 12 km/h (0.1 7.5 mph) for the Valiant Rehab;
- Speed adjustment in the range of 1 25 km/h (0.6 15.6 mph) for the Valiant Plus;
- Speed adjustment in steps of 0,1 km/h (0.1 mph);
- Programming possibilities for user defined tests;
- Well-known standard tests like Bruce or Balke are preprogrammed;
- Programming possibilities for heart rate controlled running are optional available;
- Shock absorbing design for running comfort;
- Stop feature with magnetic lanyard for safe use of the treadmill;
- Optional rear elevation of the treadmill permits downhill walking in the same direction;
- Easy accessible and simple control unit on the front handrail for operator comfort and maximum safety;
- Adjustable angle for control unit mounting;
- RS232 interface for connection to external equipment;
- The belt is centred automatically: no additional adjustments are necessary;
- Quality AC motor delivers precise speed control; there is no "lag" when the foot strikes the belt;
- The treadmill is almost maintenance free: no belt-greasing is required and the motor has no friction parts;
- Quiet operation.









Valiant with optional safety belt and fall-stop



Standard speed range	0,5 – 20 km/h 0.3 – 12 mph	0,1 – 12 km/h 0.1 – 7.5 mph	1 – 25 km/h 0.6 – 15.6 mph
Height adjustment front side	0 – 25%	0 – 25%	0 – 25 %
Walking surface	50 x 150 cm	50 x 150 cm	60 x 170 cm
Maximum patient weight	160 kg	160 kg	160 kg
Power requirements - Motor	230 VAC, 50-60 Hz. 115 VAC, 50-60 Hz. (2 phases) 1,8 Kw	230 VAC, 50-60 Hz. 115 VAC, 50-60 Hz. (2 phases) 1,8 Kw	230 VAC, 50-60 Hz. 115 VAC, 50-60 Hz. (2 phases) 1,8 Kw
Interface	RS232	RS232	RS232
Dimensions (L x B x H), cm	213 x 90 x 135	213 x 90 x 135	233 x 102 x 135
Weight	149 kg	149 kg	170 kg
Environmental conditions  Operational:  - temperature °C (°F)  - humidity (non-condensing) %  - air pressure kPa  Storage:  - temperature °C (°F)  - humidity (non-condensing) %  - air pressure kPa	14 – 40 (57 – 104) 30 – 90 70 – 106 -25 – 70 (13 – 167) 10 – 95 50 – 106	14 – 40 (57 – 104) 30 – 90 70 – 106 -25 – 70 (13 – 167) 10 – 95 50 – 106	14 - 40 (57 - 104) 30 - 90 70 - 106 -25 - 70 (13 - 167) 10 - 95 50 - 106
Standard & Safety Norms	ISO 9001:2000, ISO 13485:2003, IEC 601-1	ISO 9001:2000, ISO 13485:2003, IEC 601-1	ISO 9001:2000, ISO 13485:2003, IEC 601-1
Safety / emergency stop - Magnetic lanyard - Stop button	Standard Optional	Standard Optional	Standard Optional
Heart rate	Optional	Optional	Optional
Rear elevation - Mechanically -10 – 0% - Electrically -10 – 0%	Optional Optional	Optional Optional	Optional Optional
Entrance plate	Optional	Optional	Optional
Anti-slip strips	Optional	Optional	Optional
Side handrails fixed - height: 850 mm	Optional	Optional	Optional
Side handrails adjustable: - Height: 791 – 954 mm - Width: 440 – 975 mm	Optional	Optional	Optional
Pediatric front handrail	Optional	Optional	Optional
Adjustable pediatric side handrails: - Height: 600 – 763 mm - Width: 440 – 975 mm	Optional	Optional	Optional
Arm support	Optional	Optional	Optional
Wider / Longer running surface	Optional	Optional	Optional
Safety belt and fall-stop	Optional	Optional	Optional
Body weight unload system	Optional	Optional	Optional

changes without prior notice

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