

## Technical data

Ergometer for cardiac rehabilitation	
Brake system	microprocessor controlled eddy current brake
Load / accuracy	6 - 999 Watt, speed independent / according to DIN VDE 0750-238
Speed range	30 - 130 rpm
Handlebar adjustment	● angle: 360°      ○ angle: 360° / height: 90-126 cm
Saddle height adjustment	● mechanical, continuous      ○ motor-driven, continuous
Patient weight	160 kg (max.)
Control unit	
Graphic display / patient display	load, rpm, time, blood pressure, heart rate, ECG (LCD) / rpm (LED)
Keyboard	membrane keyboard
ECG amplifier	single-channel ECG amplifier (3 individual leadwires / disposable electrodes)
Chipcard reader	●
Options	
Electrode application system (3 vacuum intensities)	○
Automatic blood pressure measurement	○
Oxygen saturation measurement	○
Miscellaneous	
Interface	digital (RS-232) for ERS system
Dimensions, max. (L x W x H) / weight	approx. 90 cm x 46 cm x 133 cm / 61-69 kg
Power	90-265 V / 50-60 Hz / 60 VA max.
ERS software	
Ergometer control (incl. ECG, chipcard)	16 ergometers max.
Treadmill control (incl. ECG, chipcard)	○
Patient and analysis database	●
Patient diagnosis / anamnesis	integrated diagnosis worksheet
Training types (individual / group training)	constant pulse / constant load / interval / user-programmed protocols (incl. warm-up and recovery phases)
ECG storage	continuous for all patients and all analyses
Documentation	storage of all training data / numerous display and printout formats
Network-compatibility / data export / archive	○

\* Please order the detailed ERS system description.

● Standard      ○ Option

# ergoline

ergoline GmbH  
Lindenstrasse 5  
D-72475 Bitz  
Germany

Tel.: +49-(0)-7431 - 9894 - 0  
Fax: +49-(0)-7431 - 9894 - 128  
email: [info@ergoline.com](mailto:info@ergoline.com)  
internet: [www.ergoline.com](http://www.ergoline.com)

Development and production of all ergoline products are subject to a certified quality management system according to DIN EN ISO 13485:2003.  
All products are CE-marked and fulfill the requirements of the Medical Device Directive 93/42/EEC.

Some of the illustrations in this brochure show options which must be purchased separately.  
All information provided is based on data valid at the date of printing.  
Subject to modifications.

ERS



*Cardiac Rehabilitation*

**ergoline**



## *ERS - Ergoline Rehabilitation System*

Systematically developing the performance of the cardiovascular system is one of the major goals of cardiac rehabilitation. Ergometer training on the basis of standardized protocols has more and more become the gold standard in rehabilitation.

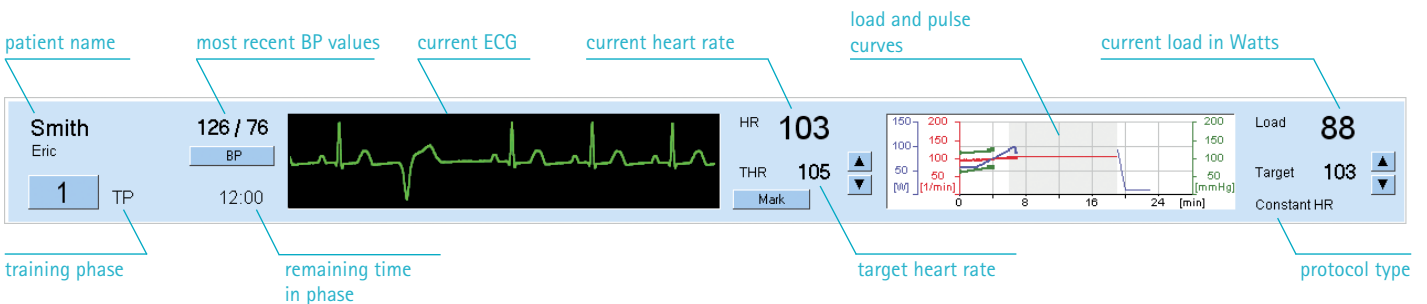
In close cooperation with physicians and physiotherapists, ergoline developed its new ERS system concept, an intuitive, sophisticated tool which is flexible enough to easily adapt to the most varied requirements.



The quality guidelines for cardiac rehabilitation today make high demands on the systems used. The acquisition and storage of full-disclosure data including ECG, heart rate and blood pressure for the duration of the entire test is of particular importance.

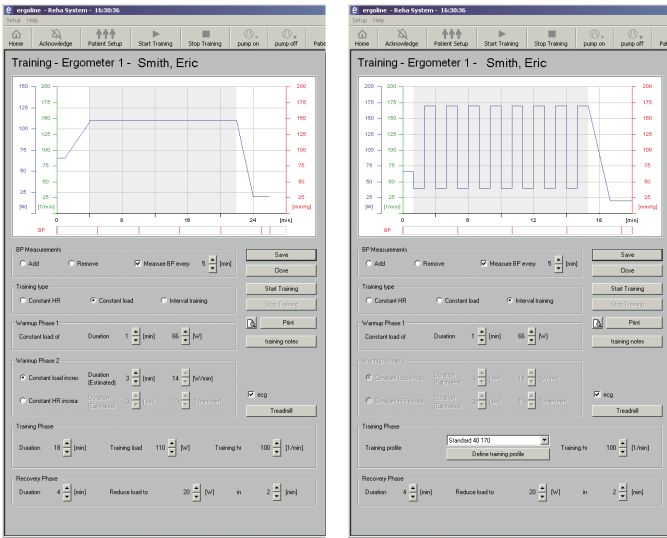
From chipcard-assisted creation of individual training protocols and reliable patient tracking to the automatic control of the connected ergometers and treadmills as well as the comprehensive monitoring of the training sessions, there is no need to accept compromise.

The full documentation of all data - even over long periods of time - is a must for the meaningful evaluation of the training outcome.



On the basis of the full-disclosure ECG and other training data displayed and stored in real time of up to 16 patients, the physiotherapist is able to quickly assess the patient status at any time during the training. The alarms whose criteria can be separately defined for each individual patient are readily identified on the display.

Even while the training is in progress, a patient's training and alarm parameters can be easily modified and adapted. In addition to manual modifications you can toggle between heart-rate-targeted and constant-load protocols at any time. It is also possible to stop the test for an individual patient whenever necessary.



With a host of options for defining warm-up, exercise and recovery phases, a patient's personal training protocol is easy to configure.

You can specify a load for constant-load tests, or you specify a target pulse rate and the ergometer will adapt the load to keep the pulse at a constant rate.

Interval training can be selected to meet special training requirements. Interval protocols specify individual training units to the second - the graphic assists in defining the protocol phases.



You can click on a particular patient's current training data at any time to view them at a larger scale. The ECG data stored up to this point can be reviewed on screen.

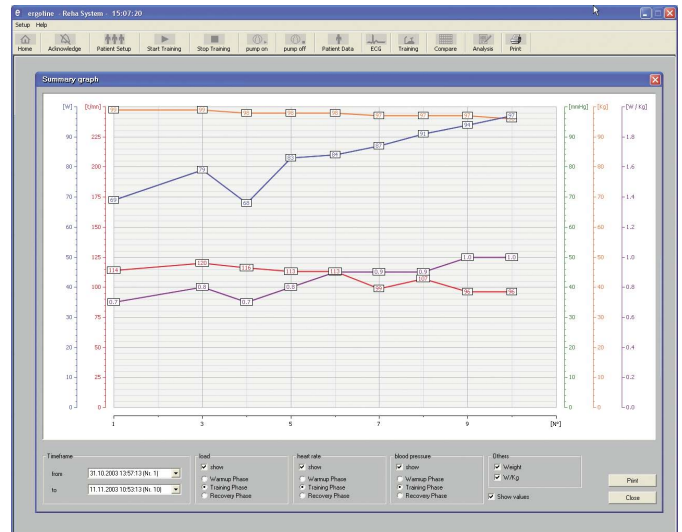
Comparing data directly with previous training sessions provides important information for the assessment of the patient's current performance.

While reviewing a patient's individual data, you never lose sight of the other ECGs and you can switch to another patient at any time.



All of a patient's single training sessions can be reviewed at any workstation in the network.

The full-disclosure ECG data as well as all other training-related information are available for analysis. Events earmarked during the training can be accessed directly. Previously acquired diurnal profiles are only a mouseclick away.



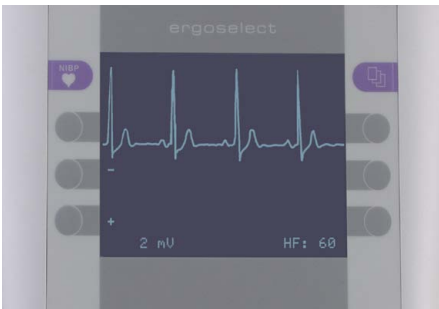
On the basis of the diagram illustrating all training units that a particular patient has completed, you can easily assess the therapy outcome.

In addition to the load levels reached, the graphs also provide a concise, clear presentation of the heart rate and blood pressure trends (warm-up, training, recovery).

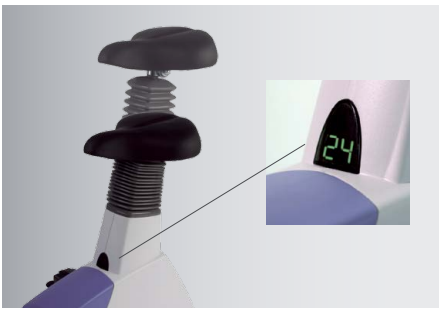
Tabular data preferred? View the training parameters in tabular format and export them for further processing.



Electrode application system



Ergometer display with ECG waveform



Motor-driven saddle height adjustment with height indication



Continuous handlebar height adjustment



ergoselect Reha

The modular rehabilitation ergometers of the ergoselect family guarantee utmost safety and trouble-free operation, even under continuous stress. To date over 35,000 ergoline ergometers are in use in practices, hospitals and rehabilitation centers.

Their special ergonomic design along with the dual adjustment capability for the handlebar (height and angle) guarantee the ideal seating position for any body height to promote performance-enhancing training.

It is the only ergometer available today whose seat height can be electrically adjusted. This allows even elderly patients or people with lower extremity impairment to mount the ergometer without any problems.

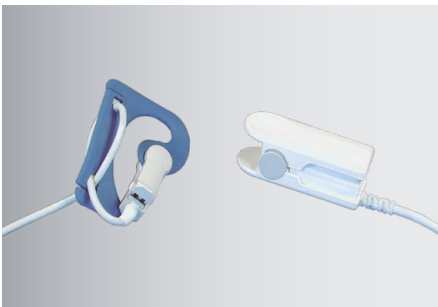
The integrated ECG amplifier - with the added option of an electrode application system with a three-level suction pump - acquires an interference-free patient ECG. Many more options and accessories, from automatic blood pressure measurement to horizontal saddle adjustment and adjustable pedal cranks are available to configure special exercise systems for individual needs.



Patient identification via chipcard



Automatic blood pressure measurement



Oxygen saturation measurement



Horizontal saddle adjustment



Cranks with adjustable length



ergoselect 400 Reha



ergoselect 600 Reha

For special patients we at ergoline can offer you special ergometer designs. They are compatible with our ergoline Rehabilitation System ERS which includes ECG amplifier and chipcard reader as standard system components. The arm ergometer *ergoselect 400 Reha* can be equipped with a wheelchair mount which allows you to securely fasten the wheelchair while your patient is exercising.

For adipose, very heavy patients the recumbent ergometer *ergoselect 600 Reha* is the exercise unit of choice. With its solid, mechanical design it permits patients weighing up to 260 kg to perform cardiovascular training.