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INNOVATION IN CARDIOLOGY

PADSY Ergo

STRESS ECG

Stress-Testing your patients – without the stress

PADSY-Ergo controls the workload your patients are subjected to – so you and your staff remain relaxed and in control. During the development of the PADSY-Ergo, the overriding priority was to achive utmost patient safety. The result is impressive and features a user interface with intuitive operation, meaning that even untrained personnel can use it safely and correctly.

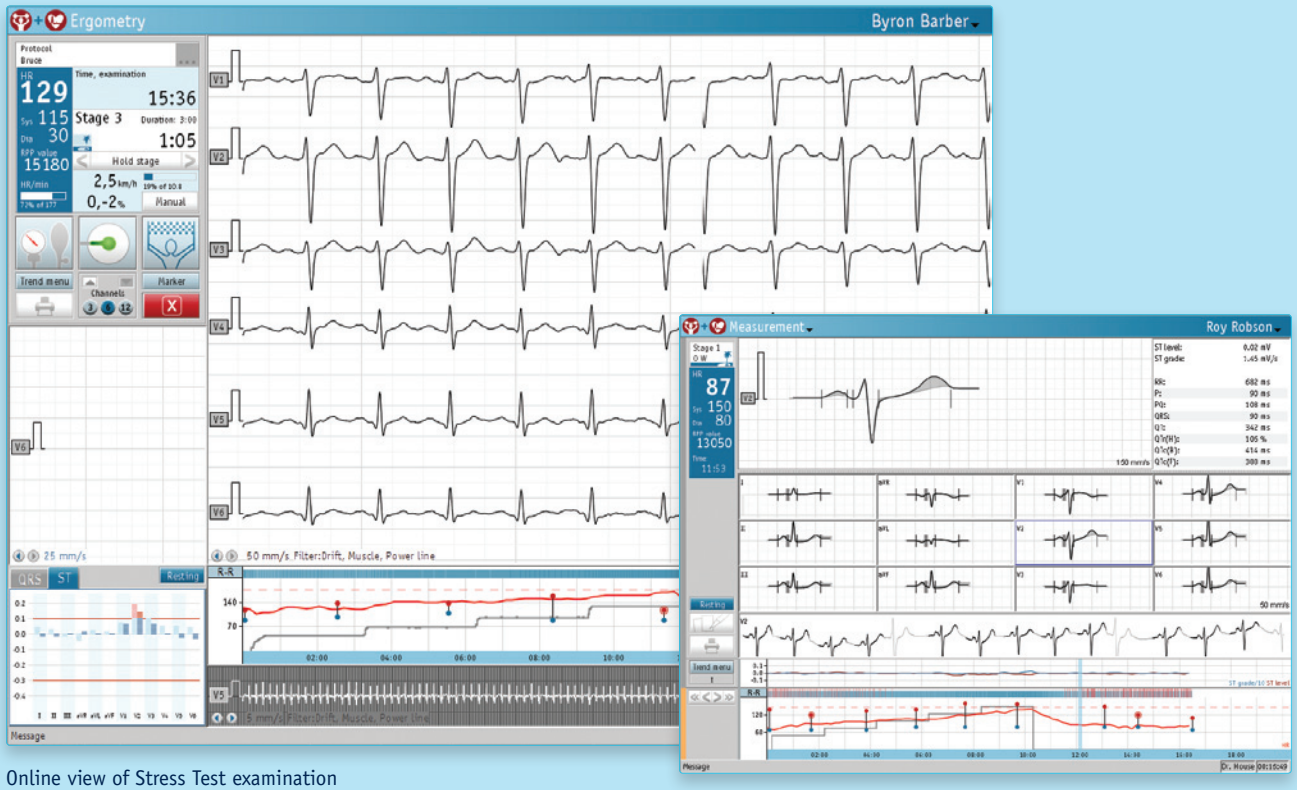
For a reliable diagnosis, the entire 12-channel ECG, including pacemaker spikes, is recorded with maximum signal quality throughout the stress test.

Thanks to the use of cutting-edge amplification technology and newly developed anti-drift algorithms, the ECG can even be assessed reliably during stress test examinations on treadmills – this is achieved by a stable base line.

Main Features

- 12-channels with full recording
- Automatic measurement
- Arrhythmia detection
- Online display of ST levels as trend and bar chart
- Display of representative QRS complexes
- "Review" function
- Automatic or manual blood pressure measurement
- Pacemaker detection
- Automatic and user events
- Target load for treadmills and bicycle ergometers
- User-defined stage and ramp protocols
- Control of many bicycle ergometers and treadmills
- Remote monitoring within a network
- Treadmill Main Features (see page 10)

Stress Test ECG



Online view of Stress Test examination

View of measurement function

Precision in analysis

For analysis and measurement, PADSY-ERGO uses the scientifically validated HES-BKG algorithms, allowing ECG pathologies to be reliably identified and displayed. If you want to be absolutely certain, you can use the dynamic "Time Cursor" in the "Review" function to check in no time at all the entire ECG, beat for beat. For comparison, the representative complex from the rest phase is always in view.

Trend charts provide you with an overview of how the ST segment has changed over time. Once the ECG diagnostic findings are ready a short time later, you can automatically generate a clearly structured report.

Whether your report is presented in the form of a printout or a PDF file, its contemporary and clear layout will reflect the efficiency and professionalism of your department.

Safety at all times

To ensure that you can keep an eye on the ECG at all times – especially when you are dealing with high-risk patients – you can use the unique "Review" function to view any ECG section from the entire trace, even while exercise training is taking place. This is even possible remotely when you are at a different workstation. Heart rate, cardiac arrhythmias and their frequency, and the violation of any limit values are clearly marked, meaning that you can reliably assess the ECG at any time. Current representative complexes can be assessed and compared with the patient's ECG in the rest phase. ST segment levels from all traces are displayed in the form of a trend and a clear bar chart. Deviating representative QRS complexes are shown online in a separate window.

Ergotop

TREADMILL

Ergotop treadmill

Main Features

Technical Specifications

- Speed range: 0.5 – 20 km/h
- Elevation: 0 – 25 %
- Walking surface: 50 × 150 cm
- Maximum patient weight: 225 kg
- Motor power: 1.8 kW
- Interface to PC: RS 232 and USB
- Weight: 145 kg
- Dimensions (L × W × H): 212 × 76 × 110 cm
- Compliance with all Standard and Safety Norms

Options

- Emergency stop button
- Rehab speed: 0.1 – 12 km/h
- Extension to the standard handle bar
- Arm support
- Entrance plate
- Body Weight Support System
- Interface to PC: Bluetooth™ or WIFI
- Rear elevation: -10 % (electrically)
- Control Unit, programmable

Ergotop, know-how in every detail

Many years of experience went into the development of Ergotop, and optimal consideration was given to the needs of medical applications in the area of cardiac and pulmonary stress testing and in the therapy of patients undergoing cardiac rehabilitation.

Good design and uncompromising safety

Ergotop's low-level design makes mounting the treadmill easy for the patient. An optional mounting platform is available for patients with impaired mobility. A safety and emergency stop facility comes as standard; it uses a magnetic safety strap to bring the treadmill to an immediate standstill if the patient should fall off. Optional a large “emergency stop” button allows medical personnel to bring the treadmill to an immediate standstill at any time. For less stable patients the handle bar can be extended to the end of the running area, thus providing additional security for your patients.

Control even without control panel

Because speed and incline of Ergotop are controlled from a PC using the PADSY-Ergo stress test software, there is no need for a control panel on the treadmill. It is therefore impossible for patients to make changes to the exercise routines. Ergotop accelerates the treadmill evenly and steadily from 0 km/h, thus ensuring that the patient can begin moving smoothly on the treadmill, without jolts. The speed is adjustable in increments of 0.1 km/h and the incline can be adjusted in increments of 1 % to a maximum of 25 %, thus meeting the requirements for highly precise stress testing.

A good feeling while exercising

The shock-absorbing design of Ergotop, combined with the full-length shock absorber under the running area, gives the patient a good feeling while exercising. The treadmill is automatically centred and does not require any lubricants. Ergotop is sturdily built and designed to run extremely quietly – virtually no noise is generated.

Maintenance not required
Ergotop is virtually maintenance-free. All moving parts are designed for permanent operation, without any need for extensive maintenance work. The drive motor is completely maintenance-free and is controlled electronically so that the treadmill speed is always the same as the set speed. If Ergotop is mounted while it is running, the speed of the treadmill does not change.

Powerful with low power consumption
Ergotop is extremely powerful and can easily transport patients weighing up to 225 kg. Even at very low speeds, Ergotop conveys the patient evenly without stopping, thus ensuring jolt-free operation. The sophisticated power transmission system allows the use of a highly efficient motor with a power consumption of just 1.8 kW – a key prerequisite for the low-level design.

Ergotop exercises your patients
Even at the conceptual phase, consideration was given to a variety of possible applications for Ergotop. Ergotop is prepared, for example, for use in rehabilitation: PADSY-Reha can be used to control the Ergotop treadmill in accordance with the doctor's instructions, following predefined exercise programmes to help patients regain their fitness. Ergotop has been equipped with suitable options for such applications, with one variant specially defined as the Ergotop-Reha. In addition to an extended handle bar, a mounting platform and a separate "emergency stop" button, the adapted speed range of 0.1 to 12 km/h is ideal for rehabilitation training.

Options for special applications with Ergotop
Various options expand the spectrum of possible applications of Ergotop, meaning that the treadmill is suitable for universal use. It is a well-known fact that it is difficult to take reliable blood pressure measurements while a patient is moving, so an arm support is available as an option to ensure that blood pressure can be monitored safely and reliably. If you wish to have the option of using Ergotop without a PC in some situations, a programmable control panel can be supplied. For patients with impaired mobility, a Body Weight Support System is available, providing support functions up to patient weights of 160 kg.

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