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cube**stress**lite

cubestress**lite** is the complete solution to manage ECG Stress tests.

cubestress**lite** combines all the typical procedures for the stress test in a single application: from patient preparation management to the real time display of the 12 leads on the screen, from printing out the trace, also available in real time, to automatic ergometer management, and from automatic archiving to printing out the final document and exporting it in electronic format.

Equipped with a highly configurable user interface and numerous operating options, **cube**stress**lite** is a tool dedicated to cardiologists and sports medicine professionals

Description

cubestress**lite** can operate as a single workstation, or the database can be shared with other networked **cube** workstations.

The main characteristics of **cube**stress**lite** are:

User Interface

cubestress**lite** makes the most of the graphic potential of Windows, guiding even inexpert users through the correct execution of all phases of the ECG stress test. Using menus, dedicated keys and guided procedures, working with **cube**stress**lite** is extremely practical and fast.

cubestress**lite** consists of a several windows which can be used to monitor all program features at the same time: from simply displaying the trace in real time in various formats to managing printouts and monitoring peripheral devices such as ergometers and pressure gauges.

cubestress**lite** manages both the execution of the stress test in real time and the post-analysis phase, organising the screen with windows designed to focus the operator's attention on characteristic aspects of the test:

- the r*ealtime* **ECG window** displays the ECG signal and its complex means in real time: the amplitude values of the *J+80msec* point or the *J+60msec* point, and the *gradient* of the ST segment are calculated for each complex mean and displayed on the screen. The **twelve leads can be displayed**, changing the amplitude and speed, or the operator can choose to display certain leads only, from a minimum of one to a maximum of twelve;
- the *realtime* **trend window** presents various diagrams showing the trend in certain relevant parameters, such as heart rate, blood pressure, load applied to the ergometer, and double product, during the test. the ST analysis trends are displayed for the twelve leads using an innovative display that is characteristic of **cube**stress**lite**. These displays combine the amplitude and gradient of each lead,. Using a special colour coding to give an overall view of the channel by channel trend in the ST segment that is immediate and efficacious. the real time ECG trace is always present to guarantee safe monitoring of the patient;

All the windows give direct access to the print functions in automatic format (pages from 10 seconds).

The heart rate, percentage of maximum theoretical heart rate, blood pressure values, double product, METs, and *step and phase times*, as well as the active *protocol data*, are always displayed in the foreground to inform the operator.

Beat-beat analysis

The efficiency and performance of the analysis algorithms, together with the calculation power of the latest generation of PCs, guarantee the accuracy of the analysis and allow the program to perform real time beat-beat analysis.

cubestress**lite** automatically performs and updates the following calculations and analyses in real time:

- Heart rate;
- Percentage maximum theoretical heart rate;
- METs;
- Double product;
- J, J+60 and J+80 amplitudes for the twelve leads

All the analysis, printout and display parameters can be customised and saved as system configurations.

Additional software modules for analysis of *RR variability in the frequency domain*, and *Late Potentials* analysis are available as advanced options.

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Managing ergometers

cubestress**lite** automatically manages a vast number of cycloergometers and treadmills, monitoring their load values according to the effort protocol set, and also allows manual changes to be made during the test.

Managing effort protocols

cubestress**lite** includes a dedicated application to build customised effort protocols. The operator can use guided procedures to create protocols for cycloergometers, treadmills or generic devices, and then make them automatically available in **cube**stress**lite**.
The most common effort protocols for cycloergometers and treadmills are already available at installation.

Managing start test procedures

cubestress**lite** offers innovative management of the procedures at the start of the test. The operator can use guided procedures to successfully and efficiently prepare the patient, manage his or her *personal identification data*, enter the *indications and treatment*, and *select the ergometer* and *type of protocol* to be used.

Compatible acquisition devices

cubestress**lite** can be used with **CARDIOLINE®HD+**, acquisition devices, using *bluetooth* technology for *wireless* connection between the patient and the workstation. **cube**stress**lite** can operate as a single workstation, or the database can be shared with other networked **cube** workstations.

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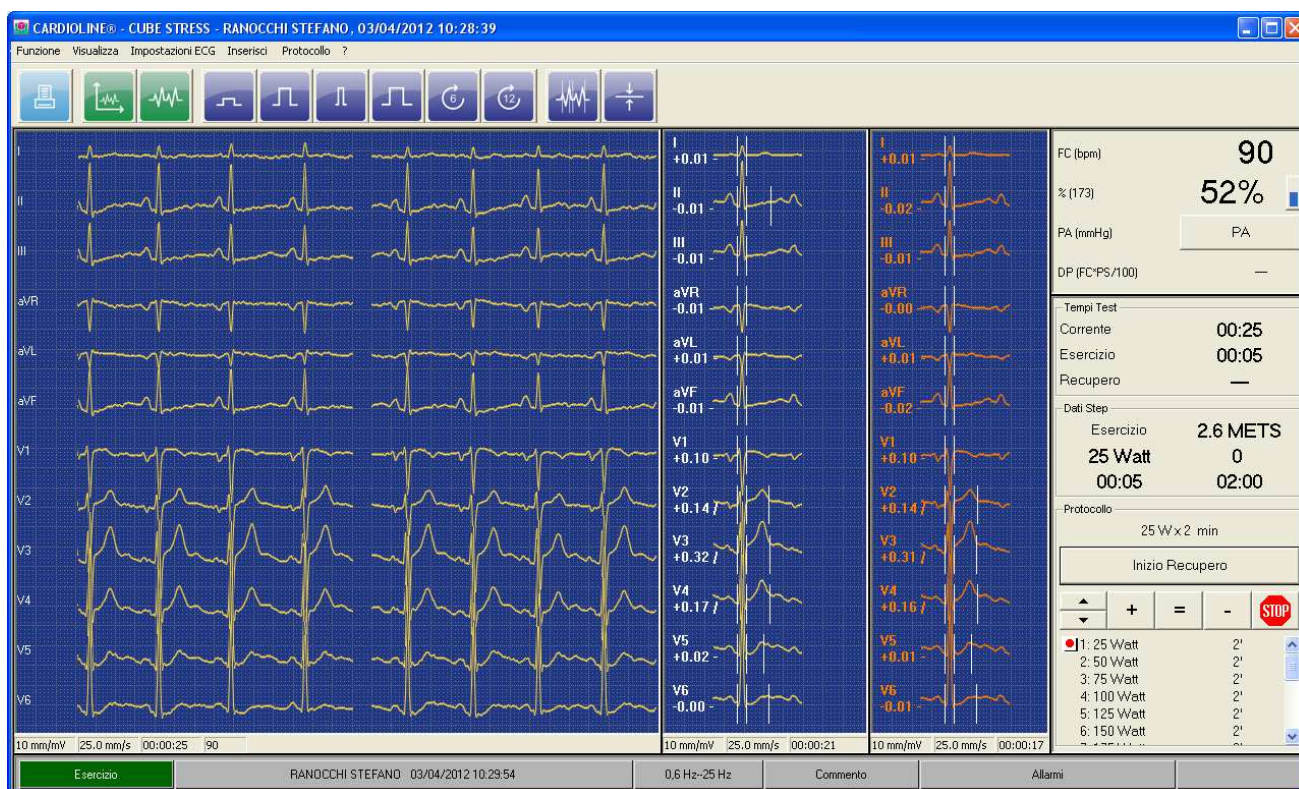
Technical Specifications

Analysis of ST	Simultaneous and independent analysis of the ST segment on 12 leads, maximum ST depression, maximum ST elevation, trend ST.
Alarms	Electrode detached, acquisition device message, ergometer message.
Print management	Printer options for programmed printout every minute, 3 minutes, every step, every phase or on request.
Print format	12 channels+AVG, 6+6+AVG, 12 channels, 6+6.
Ergometer management	Fully automatic Extensive list of compatible treadmills and cycloergometers.
Effort protocol management	Extensive list of effort protocols already preloaded in the program. Possibility of defining and saving customised protocols for cycloergometers, treadmills or generic devices.
Print document	Fully customisable.
Trace archiving	Automatic archiving in the database; optional DVD backup in the SW package.
Network connection	Can be networked and database can be shared with other **cube** workstations.