

Esaote enhanced ergonomics system design



Ultrasound (US) examination time reduction is an important request in a sonographer's everyday life.

Increased number of patients (productivity request) and cost reduction: two demanding forces → sonographer must work faster without caring about scanning posture.

Numerous repeated actions performed → can lead to work-related musculo-skeletal disorders (WRMSD).

The issue of ultrasound (US) systems' ergonomics is treated in many standards and guidance documents (from regulatory organisations, healthcare institutions and sonographers' associations).

Percentage of sonographers reporting consequences of work-related musculo-skeletal disorders (WRMSD): 80% within 5 years of entering the profession.

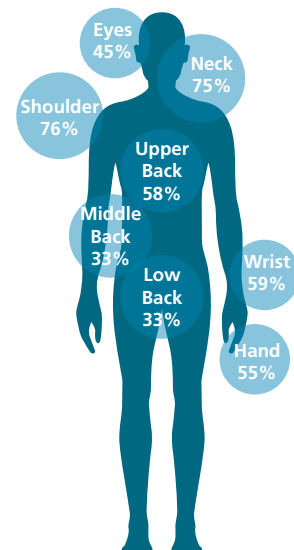
Most common areas of discomfort and pain for the US user:

- Neck
- Shoulder
- Wrist
- Hand
- Back
- Eyes

Analysis of these problems has led to the creation of Esaote Enhanced Ergonomics tools.

Newly introduced Esaote systems are characterised by a high-definition touch screen which concentrates all the main features of the reconfigurable graphical user interface in a well-defined area close to the trackball, reducing repetitive distant movements related to reaching and repeated uncomfortable actions.

The repetitive distant movement is reduced up to 40%.



Technologies developed for easy-to-use systems to enhance productivity and reduce operator's stress and fatigue:

Advanced AutoAdjust

Image gain and TGC adjustment at a simple touch of a button. Image equalised from near to far field for homogeneous energy distribution for axial and lateral optimisation.

eTouch

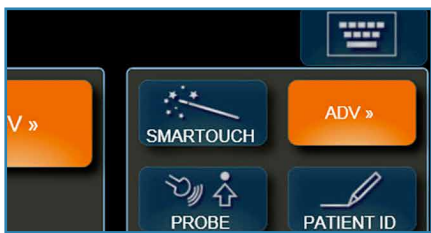
Task recorder working as a macro machine. The user records the sequence of buttons and controls activation while regularly using the system. Then, the user can recall the sequences whenever necessary.

- keystroke reduction: up to 30%
- upper-body movement reduction: up to 17%
- muscular activation reduction: up to 50%
- execution time reduction: up to 30%



SmarTouch

Quick access to multiple setting adjustments in real-time, directly on the interactive touch screen.



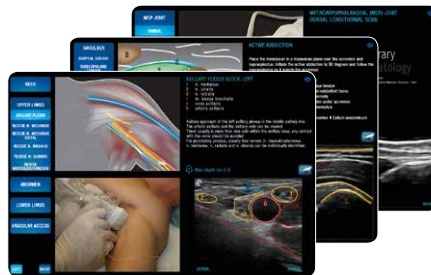
Protocols

User-defined set of actions for reducing the number of keystrokes and providing step-by-step reminders of the sequences needed to perform an examination.



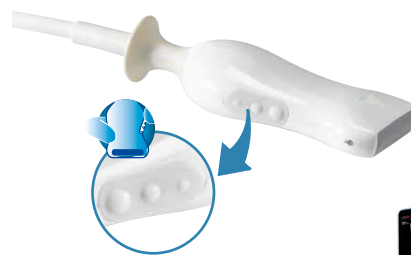
MyLibrary

On-board users' reference, which includes an anatomical atlas and "How-to" reference images for multiple clinical applications.



Ergonomic controls where needed

Programmable controls on the probe body to be able to quickly activate multiple pre-programmed functions.



Esaote ultrasound systems are designed with:

- simple user interfaces
- personalised automation tools
- intuitive and immediate menus

Systems fully usable in everyday real clinical practice to ensure operator natural actions with the least strength possible in terms of musculoskeletal stress and mental concentration

Controls within reach, reduced distances from the trackball of the most used functions, shortcuts and macro recall capabilities to automate and speed up frequent actions

Esaote Enhanced Ergonomics: Easy-to-use high level technologies for less user stress and more energy to focus on the patient.

Enhanced diagnosis confidence and less concentration demanded to use the system.

Data supported by scientific papers



MyLab™ Gamma

MyLab™ Alpha

MyLab™ Six

MyLab™ Seven

Thank you for considering Esaote

Where listen to your needs and work every day to provide the most advanced technologies and the most innovative design for you to excel in the care of your patients.

Please visit us online for more information

