

Esaote MyLab: Ultrasound imaging technology tailored for the user

As a leading player in the diagnostic ultrasound market, active since 1983, Esaote has a long experience in developing and fine-tuning ultrasound systems and probes for a broad range of clinical segments.

MyLab Ultrasound solutions are shaped to answer the most demanding clinical needs in many applications: from abdominal to vascular, including musculoskeletal, internal medicine, cardiology, obstetrics and gynecology, as well as interventional ultrasound guidance.

Esaote puts a high effort in designing systems that offer top image quality for confident diagnosis from difficult-to-scan patients up to fully detailed superficial image resolution. This has been achieved over the years through advanced research, with several patents and publications, and effective implementations on the system and also on the probe side, the latter offering a broad choice of in-house made transducers ranging from traditional phased, linear, convex and endocavity to dedicated solutions for surgery and intervention. The Esaote probe family has recently been extended with the brand new High Frequency Hockey Stick probe IH 6-18 and the Biopsy dedicated 0 degree insertion convex transducer SI2C41. Customizable buttons on the probe body enhance comfort and increase possibilities.

Advanced hemodynamic evaluation tools such as XFlow and HD CFM, tissue stiffness evaluation with ElaXto as well as Vir-

tual Navigator for easy-to-perform real-time fusion imaging are just a few examples of Esaote advanced technologies tailored to meet any requirements up to the most demanding ones.

Virtual Biopsy and Needle Enhancement technology are valuable tools to facilitate needle insertions for simple biopsies as well as percutaneous treatments.

Top level Contrast Enhanced Ultrasound (CEUS) as well as advanced cardiovascular tools such as the 4D XStrain volumetric cardiac deformation analysis tool and the Radiofrequency-based Intima Media Thickness (QIMT) and Arterial Stiffness (QAS) measurement tools are featured, reflecting the "Creativity in Healthcare" Esaote mark.

Esaote's commitment to ergonomics and innovative design solutions is embodied in its systems and probes portfolio which addresses the issue of ultrasound (US) systems ergonomics mentioned in many standards and guidance documents (regulatory organizations, healthcare institutions and sonographers associations). As many as 80% of sonographers report work-related musculoskeletal disorders (WRMSD) within 5 years of entering the profession.

Workflow optimization and automation tools have been designed with the help of, and collaborations with important clinical and technical reference centres and universities.

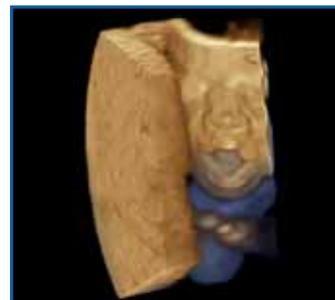
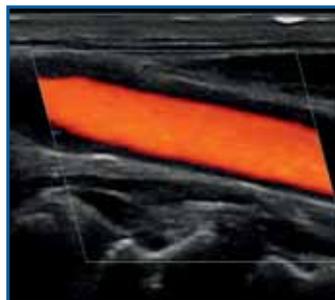
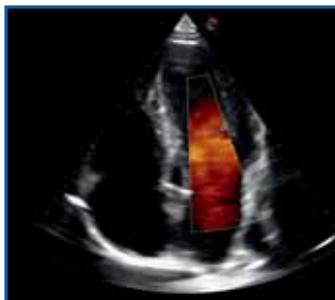
Interviews and extensive scanning sessions with numerous ultrasound users ranging from sonographers to physicians, from surgeons to paramedics helped us to have a clear view of the different environments and user needs our systems have to be designed for.

The eTouch screen-based fully automated workflow, customizable protocols and ergonomically shaped appleprobe transducers maximize productivity.

The user interfaces are readily understandable and intuitive enabling easy operation of the system in any scanning condition.

EVOLUTION is Esaote's continuous system updating programme, offering the latest technological and clinical updates and anticipating on future standards, giving the necessary peace of mind for hospitals, clinics and private practices with regard to their investment.

MyLab ultrasound solutions are available as properly dimensioned systems for any floor space and clinical requirements. Today our ultrasound product family expands with the MyLabSix CrystaLine.



Esaote's MyLabSix CrystaLine Ultrasound system offers exceptional image quality for confident diagnosis in a compact design. CrystaLine top level image technology is now embedded in a solid system with a particular attention to ergonomics and ease of use. CrystaLine represents a significant evolution of Esaote ultrasound technology that delivers new levels of accuracy, quality, versatility and value. Its superior technical capabilities enable high quality images to be captured at greater depth in the body. This significant improvement overcomes the challenges associated with larger and more difficult-to-scan patients.

Today CrystaLine technology is also available on the compact MyLabSix CrystaLine Ultrasound system, providing top image quality in an innovative design system able to fit comfortably in any environment.

Improved diagnostic value results from the optimization of all aspects of the signal chain, from the echo generated by the patient up to the display on the system, together with maximization of ultrasound scanning efficiency.

CrystaLine represents Esaote's latest technological innovation and is especially focused on image quality enhancement regarding penetration and increased image details and resolution.

Difficult-to-scan patients are comfortably examined with the MyLabSix CrystaLine upgrade thanks to its better penetration, optimal image contrast, increased spatial resolution and fewer speckle artefacts. Detailed images are acquired also with



obese patients, providing clinical confidence even in very deep areas.

CrystaLine engine is fine-tuned with Esaote IQ probes in order to optimize penetration frequencies to completely exploit the energy delivered, thereby achieving a higher level of diagnostic clarity.

CrystaLine provides a further significant reduction in speckle while increasing signal-to-noise ratio.

The combined use, at the same time, of XView and MView Spatial Compound Imaging gives the user a superior ultrasound imaging quality.

A higher frame rate is achieved thanks to the system's improved front end, higher density probes and faster data processing.

The CrystaLine-powered MyLabSix represents a major improvement in all relevant clinical aspects of diagnostic ultrasound scanning, namely,

- Improved penetration
- Higher spatial and contrast resolution

- Maximized temporal resolution due to higher frame rate

Esaote has always implemented the latest visualization tools and technologies in order to ensure clear, information-rich images through a continuous updating of both hardware and firmware of visualization monitors and screens. This tradition continues also with MyLabSix CrystaLine where the latest digital panel innovations have been used.

MyLabSix CrystaLine is a fully usable system in everyday clinical practice, enabling natural operator actions with minimum musculoskeletal stress and mental concentration.

Controls within reach, reduced distance from the trackball of the most used functions, shortcuts and automated macro recalling capabilities speed up frequent operator actions.

Wireless and wired connectivity options offer numerous data saving and transmission options.

Finally the core of MyLabSix CrystaLine system reduces energy consumption, thereby lowering operational costs.

The appeal of MyLabSix CrystaLine's innovative technology is further enhanced by its stylish made-in-Italy design.

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