

Commitment to Reduction of Work-related Musculoskeletal Disorder (WRMSD)

ProSound Alpha 6 Sets New Bar for Ergonomic Design



Ultrasound examination is widely performed as it is a non-invasive and safe imaging modality and can be used for a variety of applications. In the examination, however, the examiner is apt to take unnatural postures, bearing a large burden physically. Such unnatural postures are believed to be one of the factors that cause WRMSD.

At Aloka, we continue to develop ergonomic friendly ultrasound systems that reduce the burden on the user's body and alleviate WRMSD.

User Friendliness Leads to Patient Friendliness

Our products directly connect Aloka and the user.
Therefore, we strive to convey our thoughts through the products.

The main theme of the ProSound systems is to offer friendliness to the users and also the patients who undergo examination and treatment.

The systems express the friendliness by appealing to the senses. Ease of use based on ergonomics, size and the weight of the system, safety of the material, good feeling. We believe all of these lead to the comfort, reassurance and safety of the user and the patient.

To realize the friendliness, we are making the following approach.

◆ Ergonomic Design

Work-related musculoskeletal disorder (WRMSD) of sonographers is an important issue that Aloka addresses.

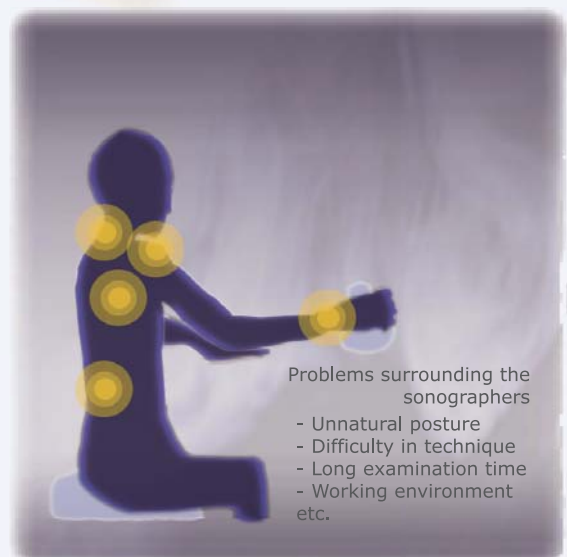
Many sonographers feel a burden on body and complain of pain caused by performing examinations with unnatural posture and body positioning.

Aloka's ultrasound systems take in ergonomic design based on the evidence to ease the burden on the sonographers as much as possible.

◆ Problems Surrounding the Sonographers

We believe that the working environment around the sonographers would be one of the factors that provoke WRMSD.

Aloka is working with the Japan Society of Ultrasonics in Medicine to make guideline for ultrasound examination including the system design, the working environment and the examination procedure.



Truly Ergonomic Design

Aloka designs products by employing various ergonomic designs to realize friendliness. Such products have been validated in reducing burden on the examiner in actual use.

◆ Approach to Minimize Burden on the Muscle

The height of the operation panel of the ProSound Alpha 6 can be lowered down to 75 cm from the floor. By making the lower part of the main body compact, a large leg space can be created, so the examiner can come very close to the panel. This design permits the examiner to operate the system in natural sitting postures (Fig. 1).

◆ For Ease of Use

The ProSound Alpha 6 is equipped with a large 10.4-inch LED touch panel, which allows for a simplified operation panel and streamlined workflow. The menus displayed on the LED panel can be customized according to the department or the physician. Even an examiner who is not so familiar with this system can use it intuitively by the well-organized panel layout. For example, the frequently used switches are arranged around the trackball (Fig. 2).

Increased efficiency allows the examiner to perform a thorough examination without feeling rushed.

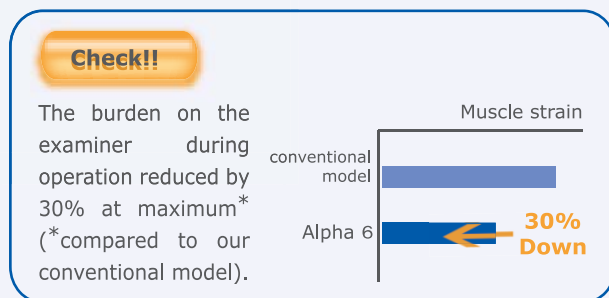


Figure 1: Measured results of reduced muscle strain

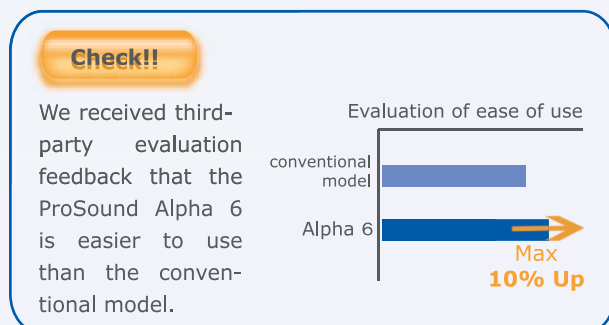


Figure 2: Subjective evaluations

Fig. 1 & 2 Both are results of the collaborative research of Graduate School of Chiba University* and Aloka Design Center.

* Humanomics Unit, Department of Design Science, Graduate School of Engineering, Chiba University

Commitment to Friendliness

Powerful, Friendly and Compact

The compact and lightweight design is an attractive feature of the ProSound Alpha 6. It enables examination at patients' bedsides and in the ER with ease. Ergonomic design, intuitive panel layout and the large LED touch panel alleviate the burden on the examiner.

The curved body makes the experience more comfortable for patients. Low power consumption is friendly to the environment.



Renal flow (eFLOW)

High Level Functions and Image Quality

The ProSound Alpha 6 inherits the technologies from our high end models for more efficient diagnosis. It offers high-definition imaging and abundant applications.

- Excellent image processing functions including BbH, AIP and SCI.
- eFLOW that can delineate dynamical blood flows with high sensitivity.
- Wealth of analysis software items: eTRACKING, TDI analysis and others.
- Ample 3D/4D functions including RT-3D (4D), AVM, MSI and Flow 3D.



Fetal profile_25 w (RT-3D (4D))



ProSound Alpha 6 Presented the iF Product Design Award 2010

The ProSound Alpha 6 was presented the iF Product Design Award 2010. The iF Design Award is one of the world's most prestigious awards. The review is done from various angles: design, material, environmental friendliness, functionality, safety, etc. Every year hundreds of vendors submit products for the competition and only those that are highly evaluated are awarded. Winning of this award proves that the ProSound Alpha 6 obtained a high evaluation internationally.

Our mission is to make products considering the people who use them.

Aloka is working hard to make products that are friendly to the users, patients and the environment.

Aloka will do our best to fulfill your expectations.



We strive to provide quality products and services for our customers. We operate with regard for the environment.

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