

PRESS INFORMATION

Olympus supplies high-tech products for minimally invasive surgery – development takes place hand-in-hand with prominent doctors and research establishments

Ergonomics through product design

Hamburg, 28 June 2010 – Medical technology is subject to a process of continuous evolution aimed at making diagnoses more distinct and operations safer. Alongside the latest technology, design and functionality also provide important support for doctors during their operations.

Innovations often come about in medical engineering through the continuous feedback from doctors. An intelligent design consistently geared towards everyday medical practice ensures ease of handling and hence a high level of working safety. In addition to its strong orientation towards technology, Olympus focuses on an intensive dialogue with customers and on collaboration with leading research establishments, universities and clinics. Anatomical, physiological and psychological knowledge forms input for product development, allowing working conditions to be adapted to humans as far and as individually as possible.

At the forefront of development are the functionality and safe use by the user. An instrument does not fulfil its user's aspirations in practice until it can be applied efficiently and comfortably, supporting natural sequences of movement. This reduces symptoms of fatigue and helps medical staff to use the devices safely.

Product design is systematically adapted to new surgical techniques. One example of this is LESS (laparo-endoscopic single-site) surgery, that is endoscopic operations through a single access point. The HiQ LS manual instruments specially developed for this new surgical method are angulated twice and make optimum use of the confined space with their curved shaft. This allows a similar operating technique to be employed as that for standard laparoscopies, which means it can be easily learnt and applied by

doctors – thus exploiting the benefits of the new surgical technique to the full.

Olympus instruments are regularly honoured for their ergonomics with the most important design prizes, among them the Red Dot Design Award, IF Design Award and the Good Design Award.

Olympus also fulfils individual customer wishes: the Technical Solution Centre concentrates on developing and producing tailor-made applications to meet the client's requirements.

With its ENDOALPHA system solution Olympus is optimizing ergonomics throughout the operating theatre. Each new theatre is individually designed to customer requirements, with planning and implementation involving close cooperation between surgeons, the operating team and management as well as architects and ENDOALPHA project managers.

Positioning all the medical devices on ceiling-mounted supply units allows the operating theatre to meet the high standards placed on an ergonomic workplace. Stumbling hazards caused by cables lying on the floor have now been consigned to the past. All important device settings are shown clearly on the central display.

By being mounted on the ceiling, the equipment can be conveniently and quickly brought into the optimum position for the operating surgeon and entire medical team. This ensures ideal alignment and maximum freedom of movement, resulting in fewer symptoms of fatigue during the operation.

ENDOALPHA is a visionary solution for central control, communication and documentation. It enables the doctor to control all the medical equipment and peripheral systems in the operating theatre from one central location, to retrieve important information while at the operating table and to communicate worldwide via video telephony. In order to confront the new challenges in medicine, ENDOALPHA combines state-of-the-art

technologies with ease of handling and thus revolutionizes medical procedures and treatments – for the benefit of patients, doctors and hospital management.