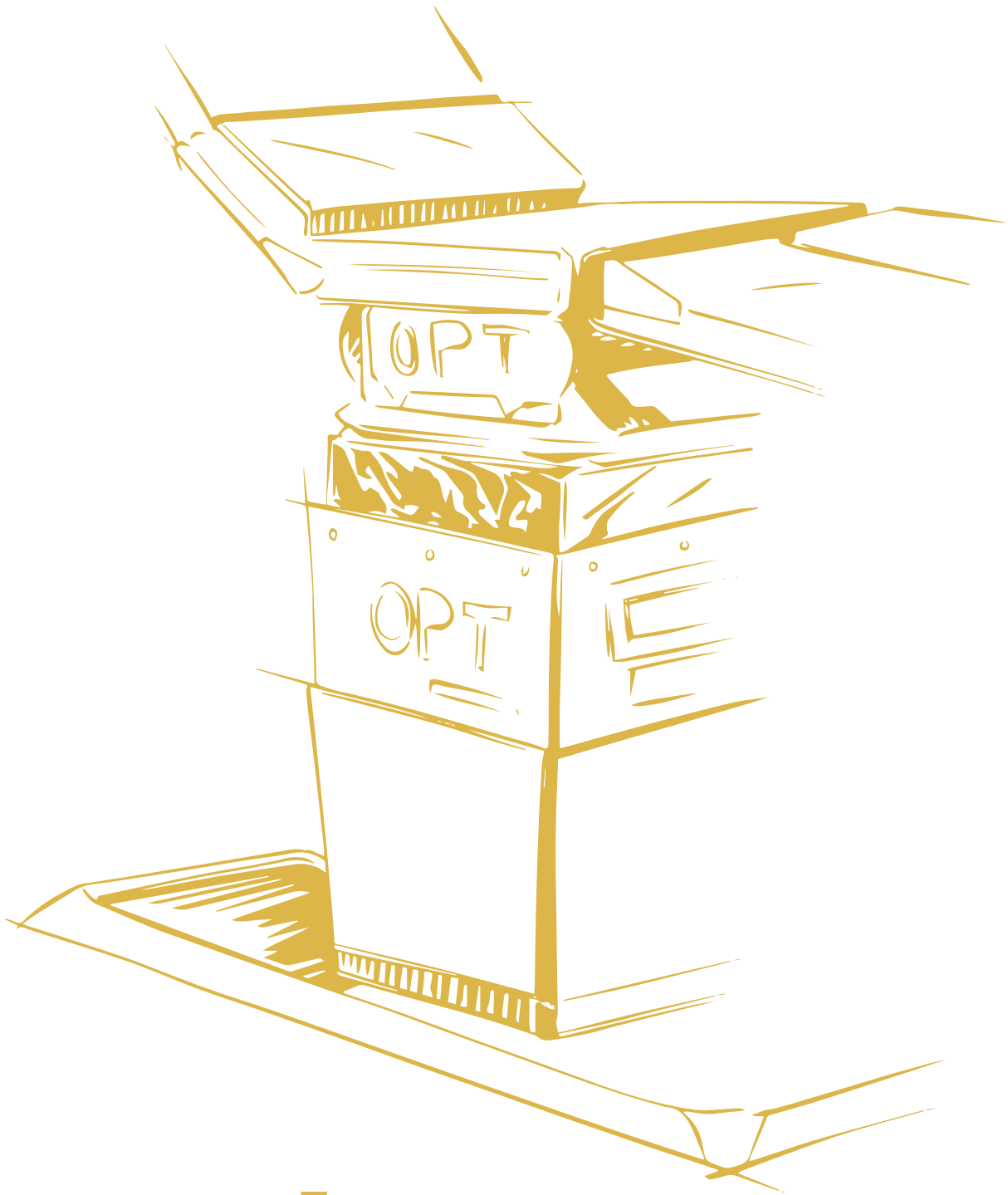


OPT

SurgiSystems



vanto

OPERATING SYSTEM
WITH TRANSFERABLE TABLE TOPS

vanto[®]
the power in surgery



OPT SurgiSystems is an Italian brand and manufacturer of operating tables and OR accessories of the highest quality. OPT's production and headquarter are located in Calliano (Trento), Italy.

For nearly 100 years, OPT has been dedicated on improving their operating tables and accessories to help the surgeons make surgery more simple, less invasive and safe for the patient. This long history of experience combined together with the technology of today, has given us the privilege to be a world leader in this sector, with installations all over the world.

With this 100 years of experience OPT continues to work closely with many high level hospitals to maintain all OPT products to the highest level and adapt to new surgical procedures.

As a result OPT SurgiSystems is one of the leaders on the national and international markets and is constantly working on its development and perfection. Close collaboration with the surgical world and attention to each detail are essential parts of our final success.





Dedicated to **you**,
who are taking care of **us**.



www.opt-ita.com



The power in surgery

The operating system with transferable table tops VANTO summarizes all the technology and know-how acquired by OPT in almost 100 years of history.

The continuing and increasing staff turnover in the operating room inspired OPT to create an operating system with **high technology** and **powerful performances** and at the same time **easy to use** and whose functions are **easy to comprehend**.

The system is composed of a **column**, two operating **table tops** and **two trolleys** (longitudinal or lateral) for moving only the table top or the entire system. The main purpose of VANTO is to satisfy the needs of both specialized and multidisciplinary operating theatres.

Three fundamental guidelines have been followed in the design of this system:

- 1. Care for the patient:** VANTO ensures maximum comfort even in case of long lasting interventions thanks to anti-decubitus cushions and silent and smooth electromechanical movements, which improve the patient's comfort and safety.
- 2. Care for OR operators:** VANTO fulfills all the requirements of various surgical procedures. The patient positioning is precise and immediate thanks to the complete modularity of the table top and the unique fast locking/unlocking system of the table top sections. The table top is also able to recognize the type of sections that are being added. The innovative software solution allows the surgeon to work with a perfect "vision" of the surgical field.
- 3. Care for hospitals:** The use of the VANTO system allows to organize a better logistics in the multidisciplinary operating rooms. The unique possibility of accessing the column from all four sides with lateral and longitudinal trolleys leads to significant time reduction and a smarter space management in the OR.

A smart operating system making complex things simply

Simplicity

VANTO has been conceived to facilitate the work of OR staff in operating rooms. A new software with control system of the configuration ensures an easy use in the picking of the table top and/or of the entire system with the help of trolleys. The **anti-collision** safety system of the outer casing of the base allows the user to make any required position safely. Furthermore, the VANTO table top has a unique **Fix Torque system** that allows to hook/unhook the sections of the operating table in a secure and rapid way and in a single movement without using additional clamps or locks.

Modularity and universality

The operating system with transferable table tops VANTO is **completely modular** with a single central section to which numerous components (head, leg and other sections) can be added. Thanks to special sensors, the table is able to automatically detect the configuration setting and the table top orientation. Moreover, the table top also boasts a wide range of accessories that satisfy the needs of every surgical discipline.

Accessibility

The VANTO system offers the exclusive possibility of accessing the column from **all four sides**. The lateral trolleys allow access indifferently from the left and the right side, while the longitudinal trolleys allow access from head or feet side of the system. Both types of trolleys are used for the transfer of the operating table top alone or for the transfer of the whole operating system. This distinctive feature allows to improve the space organization and ensures an optimal management of the patient.

Radiolucency

The table top is completely **radiolucent on its entire length**. Therefore, it allows a rational and easy use of the C-Arm and the realization of radiographies on all its length, possible also thanks to the longitudinal shift of the table top. The vascular table top and the **carbon fibre sections** allow for a **360° radiolucency**.

Technology

The VANTO system contains the technological solutions that meet the needs of both surgeons and patients. The system allows to **perform various movements simultaneously** or even to set different security protocols according to the specific requirements of the surgical operation. In addition, VANTO has a state-of-the-art **anti-collision safety system** that protects from unexpected errors or crashes.

COLUMN

Three types of column for any necessity

The column and the base are made in **stainless steel** and **noble materials** of highest quality superficially treated with state-of-the-art procedures (electropolishing for stainless steel) in order to increase the resistance to oxidation, ensuring a longer life and a greater resistance to antibacterial products.

The column contains all the electronic and mechanical components designed for the system functioning including the power supply. Therefore, even in case of discharged batteries, there is **no external power supply** that could disturb the operators.

The **unique control panel integrated in the column** controls all movements of both table top and column and allows to memorize instantly 36 different positions, any of which can be automatically recalled by the user anytime.



Mobile column

The mobile column is built on an **ultra-flat base** with minimum thickness that ensures maximum stability to the entire system. It offers an easy access to the table top for the users and avoids collisions with C-arms, pedals, trolley, etc.



Stationary column

The stationary column is fixed to the floor with 340° rotation. This allows better patient positioning for any type of the surgery. The remote control manages **the electric block system** of the column.



Mobile Plus column

VANTO Plus has **two wheels integrated** to the base of the column which allows to transfer the table **without using the standard trolley**. An auxiliary removable **mini trolley** can be used for intraoperative transfers or minor adjustments before, during or after the surgery.

TABLE TOP

Flexibility and universality in a single table top

The operating table top of the VANTO system is universal and suitable for all surgical specialties including traumatology.



Ergonomics

The table top has been designed to simplify the daily activities of the OR operators and to increase the patients' safety and comfort in order to prevent injuries caused by decubitus.

Modularity

The table top is completely modular thanks to the **single central section** to which numerous components (head and leg sections, elongation plates) can be added. The system **automatically detects the configuration setting** and the table top orientation and recognizes the sections and accessories attached to the central module of the table.



Carbon fibre table tops

The VANTO system has two types of carbon fibre table tops for vascular surgery. They were designed to satisfy the needs of cardiac surgery, vascular surgery, interventional radiology, orthopaedics - traumatology, angiography, neurosurgery and all the other surgical specialties where radiolucency is required.

- **Vascular "X" carbon fibre table top** - complete with antistatic, radiolucent, electro-conductive removable cushion. The table top has a **longitudinal slide** of 700 mm. The radiolucent area from the head side is 1840 mm (1540 mm without the head section); 1680 mm of which visible at 360 ° (1380 mm without the head section).



- **Vascular "XY" carbon fibre table top** - complete with antistatic, radiolucent, electro-conductive removable cushion. The table top has a **longitudinal slide** of 700 mm and **bilateral slide** of 105 mm, both movements can be performed **simultaneously**. The radiolucent area from the head is 1840 mm (1540 mm without the head section), 1680 mm of which visible at 360 ° (1380 mm without the head section).



Both types of vascular table tops are controlled by a IR or wired remote control. The vascular "XY" carbon fibre table top has an **optional joystick** with adjustable speed for easy and quick movements.



TROLLEY

Uniqueness that makes the difference

OPT is **the only company in the world** that can offer **3 types of longitudinal trolleys** (head side and foot side insertion) and **3 types of lateral trolleys** (right and left side insertion) to move only the table top and/or the entire system (column and a table top). This is possible thanks to the simple mechanical selector on the side of the trolley. This distinctive feature allows a rational space organization and an optimal patient management during the perioperative procedure.

The trolleys are made entirely of electro polished stainless steel. A distinguishing feature of VANTO is the possibility of **picking the table top (or the table top and the column together) manually, half-automatically or automatically.**

Both longitudinal and lateral trolleys are available in three versions:

- standard trolley
- trolley with Trendelenburg and Reverse Trendelenburg
- trolley with adjustable height and with Trendelenburg and Reverse Trendelenburg

Lateral trolley

The lateral trolley, **exclusive feature of OPT**, allows to transfer only the table top or the entire system indifferently from the left and the right side of the patient. This type of trolley is suitable for narrow operating rooms where space needs to be optimized.



Longitudinal trolley

The longitudinal trolley allows to transfer only the table top or the entire system indifferently from the head or feet side. It is easy to move thanks to a **5th wheel** which can be inserted or removed easily and quickly using a foot button.



Main features



The operating system VANTO is made of **stainless steel** and noble materials of highest quality.

The standard **cushions** of the operating table top are made in **soft, radiolucent**, antistatic, anti-decubitus and ergonomically shaped material. Their thickness of 60 mm allows a comfortable patient positioning even during long lasting operating sessions. The total **absence of stitching** on the cushions makes their cleaning extremely easy.

As an alternative, it is possible to choose **cushions in visco-elastic material** with a thickness of 80/ 90 mm. This type of cushions are **anti-decubitus**, easily removable and of **maximum comfort** for the patient. All of the cushions of the table top and of the sections are **latex free**.

Radiolucency

The table top is completely **radiolucent on its entire length**. Therefore, it allows a rational and easy use of the C-Arm and the realization of radiographies on all its length, possible also thanks to the longitudinal shift of the table top. The vascular table top and the **carbon fibre sections** allow for a **360° radiolucency**.



Unique attachment system of the table top sections

All the removable sections of VANTO have a unique **Fix Torque system**. This system allows to hook/unhook the sections in a secure and rapid way and in a single movement without using additional clamps or locks.



Bariatric surgery (for obese patients)

The exceptional **load capacity** of VANTO is **454 kg (1000 lb)***.



Electro-polishing

The **electro-polishing procedure** is currently the best technique for **stainless steel treatment**. It ensures a longer life of the material and a simple safe cleaning of the system. After the treatment, the surface is smooth, shiny, and more resistant to scratches and bacterial agents.



Washing tunnel

The operating table top and the trolley can be washed in the washing tunnel (protection against water jets: IPX6).

* With the table tops codes: 8821000 and 8822000

CONTROL SYSTEMS

New wireless remote controls with display



Total control of the table in one hand

OPT adds to its line of **wireless remote controls** state-of-the-art remote controls with **LCD touch screen display**. Thanks to this option users always have a clear control of the operating system in all its functions.

Using these wireless remote controls it is possible to make all **electromechanical movements** of the operating system VANTO (including self-levelling).

Thanks to the bidirectional communication with the column, the display allows to quickly obtain various information and to activate all functions of the system.

The main features of the new wireless remote controls with LCD display are:

- Possibility of memorizing customized positions which can be recalled any time
- Setting and selection of safety protocols for obese patients
- Visualization of all electromechanical movements of the system and movement degrees
- Automatic detection of sections attached to the central module of the table top
- Indication of the tabletop orientation on the column
- Visualization of the charging status of both remote control and the batteries of the operating system
- Information on the status of the operating system and warning through descriptive alarm messages
- Setting and selection of five languages
- Information on the use of the operating system
- Configuration of customized parameters

The remote controls have **intuitive graphic symbols** in order to make their use immediate and extremely simple even for less experienced users. They also have **backlit buttons** and can therefore be used even with soft lights.

VANTO remote controls have a **STOP button** to block instantly any movement. Moreover, the remote controls with LCD display have a **LOCK/UNLOCK button** to block temporarily the buttons and a **SPEED button** to change the movement speed.

Every remote control can be connected to a specific VANTO column through a simple and quick binding procedure. Every remote control can activate only one column at a time thus avoiding any interference with other operating systems.

In addition, VANTO controls have an exclusive button to **memorize instantaneously a specific position** of the operating system, which can be recalled by the user any time.

Integrated remote panel with display



VANTO column has an integrated remote panel with display, which can also be used as an **emergency control**. It can activate the column and the table top movements without having to use any wired or wireless remote controls.

Moreover, the integrated remote panel has a dedicated button to search for the available wireless control giving an acoustic signal.

Foot switch



VANTO can be controlled by a foot switch with three pedals that control **three electromechanical movements**: height variation, longitudinal tilt and lateral tilt of the table top.

Emergency systems



MPC system - exclusive accessory for VANTO, to use as an **emergency device** in case of failure in the electronics of the table. By connecting this device to the column or to the table top it is possible to complete the surgery intervention.

Moreover, this device allows **to move the table top sections** when they are installed on **the trolley**. This allows to position the patient in advance and therefore reduces preparation time between the operations.



EPS system - emergency device for the **power supply** of the operating system in case of uncharged batteries or power supply failure.

TECHNICAL FEATURES

*Know-how acquired in almost 100 years
of experience*

Modularity and flexibility

The extreme modularity of VANTO increases the flexibility of the OR. For instance, it allows to change the table configuration quickly and easily according to the required surgical discipline and thus adapting to the needs of OR staff.

Central module of the table top

The central section of the table top is symmetric and motorized on both sides (back and legs). It does not need any additional electric section for the electromechanical movements and performs all surgical activities without the need of moving the patient.



Attachment system

The innovative **Fix Torque system** allows to hook/unhook the sections of the operating table in a secure and rapid way and in a single movement without using additional clamps or locks.

Remote panel integrated into the column

The remote panel integrated into the column has a menu in five different languages and always indicates several information such as battery charge, table positioning, type of table top and accessories attached to the head/leg sides of the central section, movement and the Trendelenburg and Reverse Trendelenburg degrees.

Cleaning button

The integrated remote panel has a “clean” button – by pushing it, the system raises the column until the maximum height and allows an easy cleaning of the surfaces even in the overlapping areas of the outer casing.

Column all included

The column contains all the electronic and mechanical components designed for the system functioning including the power supply. Therefore, even in case of discharged batteries, there is **no external power supply** that could disturb the operators.

Column access

The VANTO system offers the exclusive possibility of accessing the column from all four sides and to move only the table top or the whole operating system using **lateral** (right and left side insertion) or **longitudinal** (head and feet side insertion) **trolleys**. This distinctive feature allows a better space organization and an optimal patient management during the perioperative procedure.

Ultra-flat base

The **ultra-flat base of VANTO** ensures maximum stability and great practicality. It avoids collisions with the surgeon, OR personnel and other devices (C-arms, etc.).

Anti-collision system

The operating system VANTO has a sophisticated **anti-collision system** of the table top that prevents from crashes against the floor.

PERFORMANCES

Extreme positions with simplicity

The operating system VANTO uses electromechanical movements that can be performed also simultaneously:

- Height variation (without cushions): 600-1.100 mm
- Trendelenburg / Reverse Trendelenburg: $\pm 56^\circ$
- Bilateral tilt: $\pm 35^\circ$
- Lower back section: $+90^\circ/-50^\circ$
- Upper back section: $\pm 60^\circ$ (with motorized section)
- Thorax flex: $+90^\circ/-50^\circ$
- Kidney flex: $+90^\circ/-50^\circ$
- Legs section: $+90^\circ/-90^\circ$ (independently right, left or together)
- Longitudinal slide of the table top: 475 mm (completely electromechanical)
- Flex – only one button for two simultaneous movements (back section / Reverse Trendelenburg)
- Reflex – only one button for two simultaneous movements (Trendelenburg / back section) with double button for the leg movement.
- Self levelling – zero automatic position with simultaneous realignment of all movements, in order to speed the maneuver and especially to avoid trauma to patients.

The system has also the following manual movements:

- Head section adjustment (removable): $+53^\circ/-53^\circ$ (tiltable without adjustment at -90°)
- Upper back section: $+60^\circ/-90^\circ$ (with foldable section)
- Legs section spread: 180°

The electromechanical Trendelenburg and Reverse Trendelenburg movements combine with the longitudinal slide to **maintain the same light point on the table top**.

Thanks to its completely electromechanical movements, VANTO is **extremely silent** in order not to distract surgeons and OR staff during the intervention. Moreover, the electromechanical movements are extremely fluid and thus increasing the patient's comfort and safety.

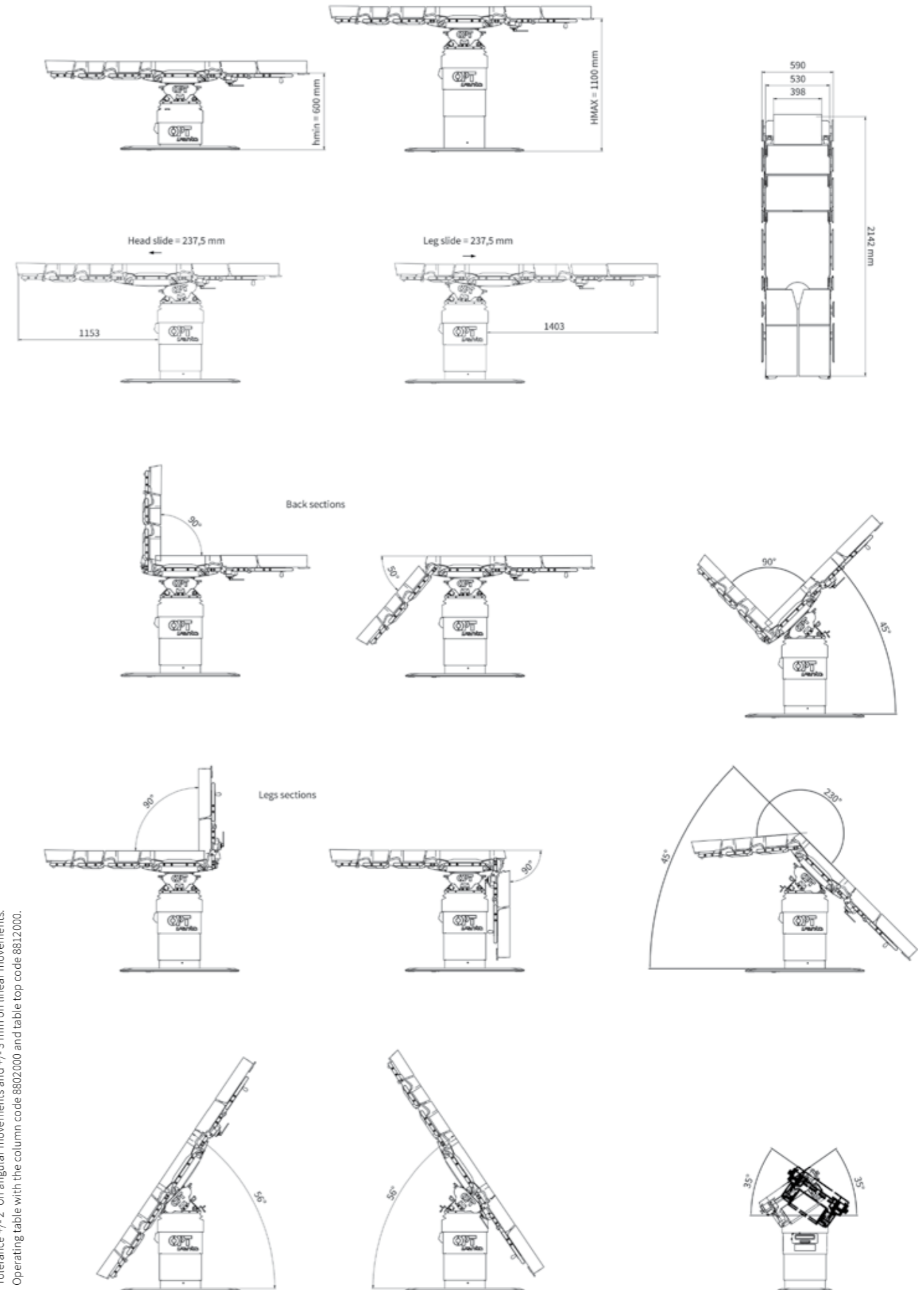
A distinguish feature of VANTO is the possibility to perform **combined electromechanical movements in a fluid and smooth way** for a quicker and simpler patient positioning.



Noise reduction and fluidity in movement

Combined movements

TECHNICAL DRAWINGS



Tolerance +/- 2° on angular movements and +/- 3 mm on linear movements.
Operating table with the column code 8802000 and table top code 8812000.

TECHNOLOGY AND SAFETY

Full safety for operators and patients

Full integration

VANTO can be integrated with the main control systems for integrated OR thanks to wireless communication protocols which comply with the most stringent regulatory standards.

Safe positioning of obese patients (security protocols)

With VANTO the user can set up several safety protocols according to needs of the surgical procedure and according to the patients' weight or height.

Automatic detection of the table top orientation

Thanks to special sensors, VANTO automatically detects the position of the head and leg sections (or of any accessory placed directly on the central section from the head/leg side). This leads to the automatic detection of the patient's orientation and to the consequent regulation of the movement degrees and the activation of the anti-collision system of the single sections.



Anti-collision system

The operating system has an exclusive **anti-collision safety system** that recognizes the sections attached to the table top and can prevent collisions against the column and/or the floor without limiting its performances.

Safety

Safety is a prior focus of OPT in the development and design of all its products. Attention is paid on the patient's safety and tranquility as well as on the safety of the operators working in the OR.

VANTO has been designed according to **passive safety** principles (a reliable, solid and efficient product) and to **active safety** principles (devices which prevent and avoid any errors caused by misuse).

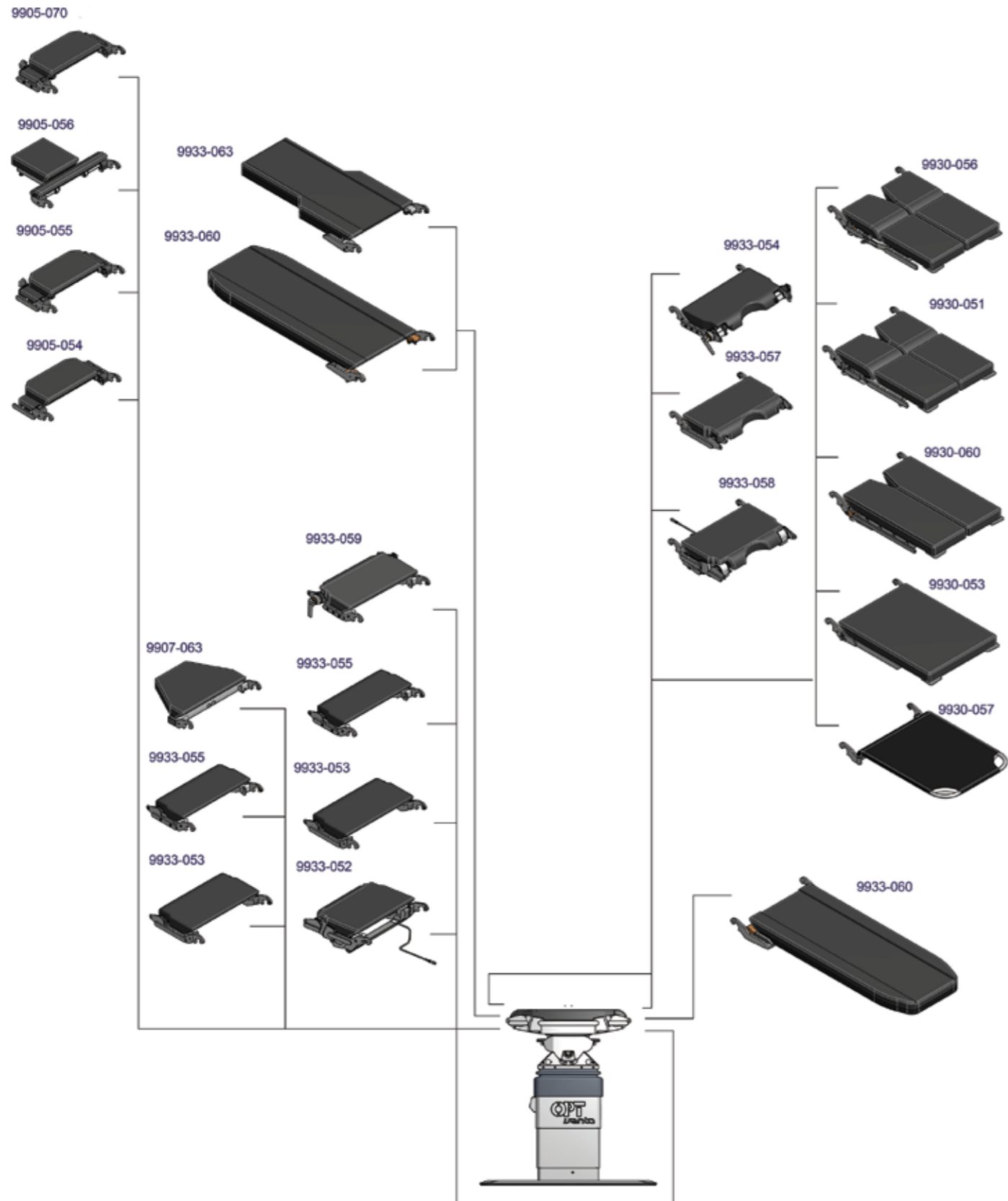
ISO Certification

OPT SurgiSystems complies with **UNI EN ISO 9001 and UNI EN ISO 13485 certification**. The company has always used high-quality materials and has complied with the most stringent regulatory standards of design, manufacturing. It controls and tests each product before the delivery to the end user. This ensures an optimal level of functionality and safe use.



The operating system VANTO is fully compliant with the regulation **93/42/CEE, 2004/108/CE, 2006/95/EC, 2011/65/CE** and with the technical standards for medical devices **CEI EN 60601-1, CEI EN 60601-1-2, CEI EN 60601-2-46**.

MODULARITY *Flexibility in the operating room*



Technical drawing of VANTO with the different configurations of the operating table.

SURGICAL POSITIONS

GENERAL SURGERY



Laparoscopic surgery



Thorax surgery in lateral decubitus



Colon surgery



Abdominal surgery



Kidney surgery in lateral decubitus (flex position)



Vascular surgery with carbon fibre section



Gynae-uro-procto in lithotomy position



Thyroid surgery

Lithotomic surgery



Lithotomic surgery with instrument tray



Goiter surgery



Shoulder arthroscopy in lateral decubitus



Shoulder surgery in beach chair position



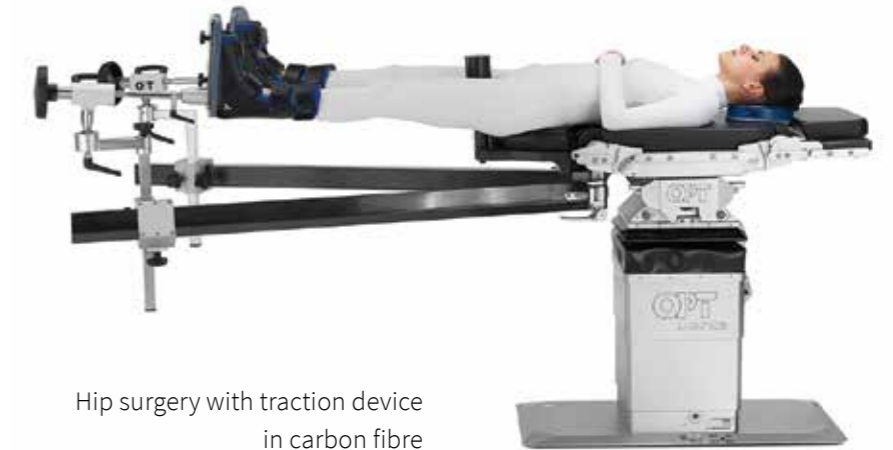
Shoulder surgery



Hip surgery in lateral decubitus



Knee arthroscopy



Hip surgery with traction device in carbon fibre



Femur surgery



Tibia surgery



Skull surgery in prone decubitus



Skull surgery in park bench position



Supine decubitus



Spine surgery in prone decubitus



Skull surgery in beach chair position



Column stabilization



Spine surgery in genupectoral position





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OPT SurgiSystems S.r.l. reserves the right to make technical modification without prior notice

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