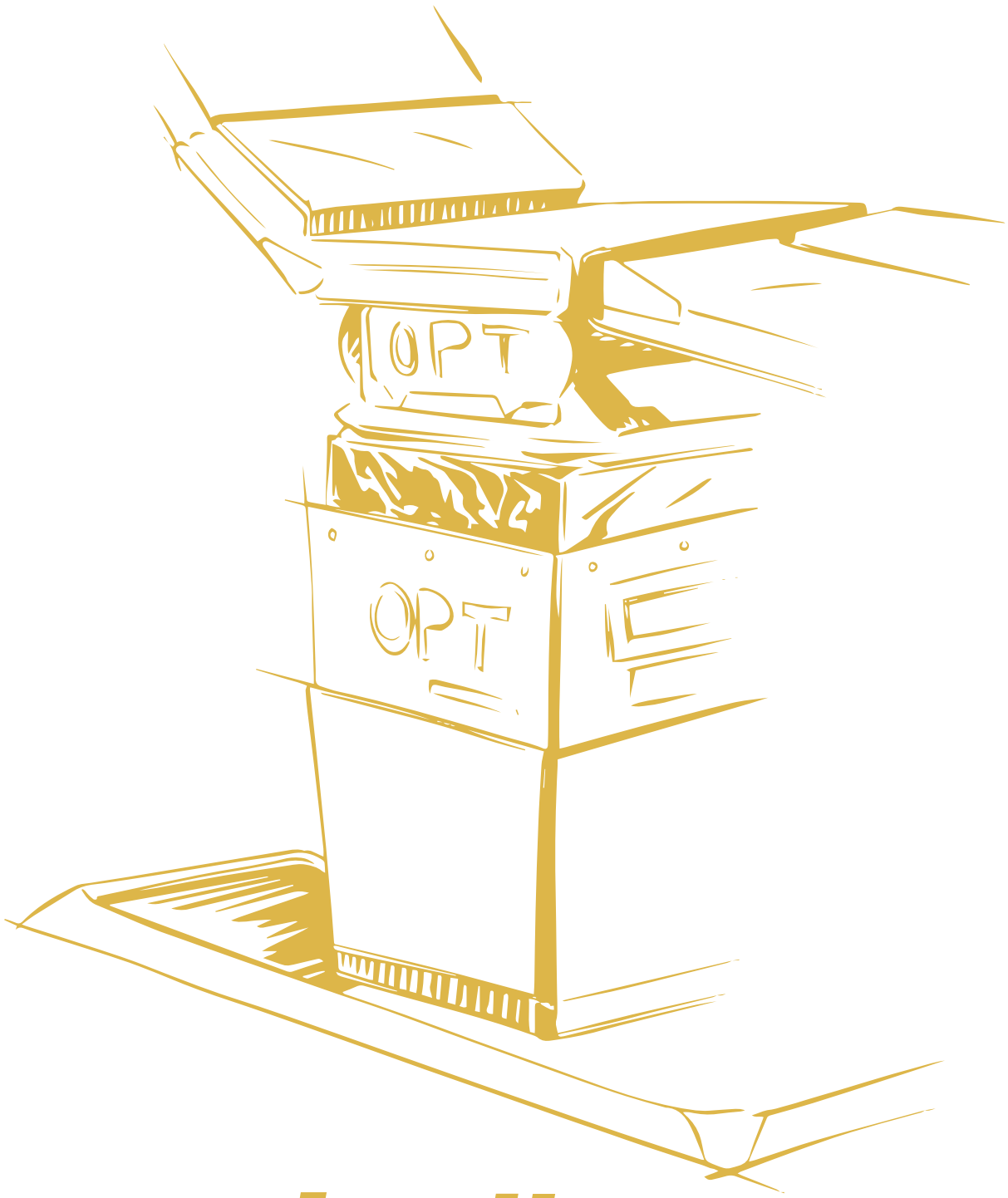
SurgiSystems



vanto II

OPERATING TABLE SYSTEM

vanto II

the power in surgery

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

OPT SurgiSystems

www.opt-ita.com

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 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.

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

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 *II* 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.

CUSHIONS *The comfortable choice*

All the VANTO *II* cushions are soft, radiolucent, antistatic, anti-decubitus and easy to remove.

The table top and all its sections have **two types of cushions**, which can be ordered depending on the surgical needs:

- Moulded cushions
- Memory foam visco-elastic cushions

Moulded cushions

The moulded cushions with a thickness of 60/70 mm have a specific ergonomic design. They have no seams or joins to allow the ingress of fluid and are easy to clean thereby reducing the chances of cross infection.

The cushions are thicker in the center of each section for a better comfort of the patient.

Memory foam visco-elastic cushions

Memory foam visco-elastic cushions with a thickness of 80/90 mm are designed to reduce decubitus problems and to give maximum comfort to patients. These cushions are suitable for long lasting interventions and reduce pressure sores.

Both types of cushions are **latex free**.

Cushion attachment system

All the VANTO *II* sections have an **easy cushion attachment system**. Both moulded and visco-elastic cushions are interchangeable. Therefore, the OR staff can choose which type of cushion to use according to the needs of the surgical procedures.

This cushion attachment system simplifies the cleaning process and allows a fast preparation of the table to the next intervention.

Carbon fibre table tops

The VANTO *II* 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 *II* 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**, optional, which can be inserted or removed easily and quickly using a foot button.

TECHNOLOGY *The tradition of innovation*

Main features

The operating system VANTO *//* is made of **stainless steel** and noble materials of highest quality. The stainless steel is treated with **electro-polished** procedure that ensures a longer life of the material and a safe table cleaning.

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 **453 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).

CONTROL SYSTEMS

Total control of the table in one hand

New wireless remote controls with display

OPT adds to its line of **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 *II* (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
- Information on the status of the operating system and warning through alarm messages
- 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 *II* 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 *II* 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 *II* 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 control keyboard

VANTO column has an integrated control available in **two version, with or without 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.

The version with display allow the operator of the OR room to have an exact replica of the remote control with display and have a live virtual view of the table positioning.

Foot switch

VANTO *II* 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 *II*, to use as an **emergency device** in case of failure on 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 the table top is 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 *II* 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 *II* 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 *II* 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 *II* 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 *II* uses electromechanical movements that can be performed also simultaneously:

- Height variation (without cushions): 600-1.150 mm
- Trendelenburg / Reverse Trendelenburg: ± 56°
- Bilateral tilt: ± 35°
- Lower back section: + 90°/- 50°
- Upper back section: ± 60° (with motorized section)
- Thorax flex: + 90°/- 50°
- Kidney flex: + 90°/- 50°
- Legs section: + 90°/- 90° (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°/- 53° (tiltable without adjustment at -90°)
- Upper back section: + 90°/- 90° (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**.

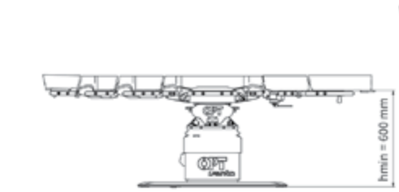
Noise reduction and fluidity in movement

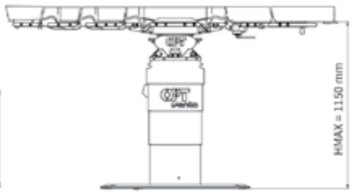
Thanks to its completely electromechanical movements, VANTO *II* is **extremely silent** in order not to distract surgeons and OR staff during the intervention. Moreover, the electromechanical movements are extremely fluid and thus increasing the patient's comfort and safety.

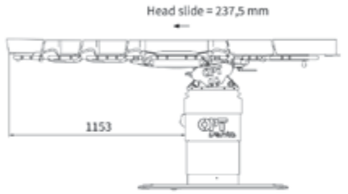
Combined movements

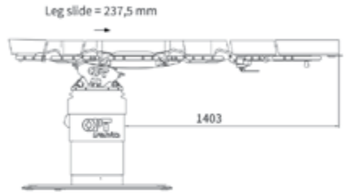
A distinguish feature of VANTO *II* is the possibility to perform **combined electromechanical movements in a fluid and smooth way** for a quicker and simpler patient positioning.

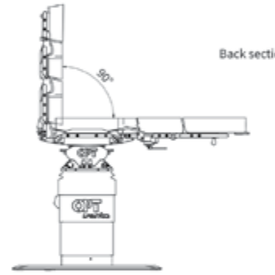
TECHNICAL DRAWINGS

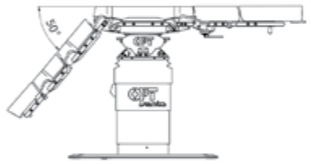


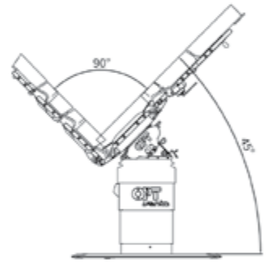


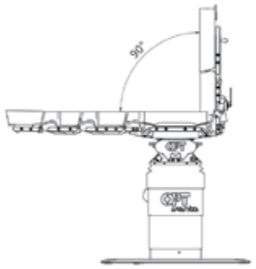


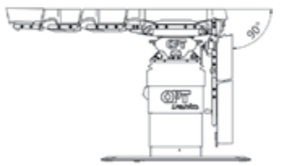


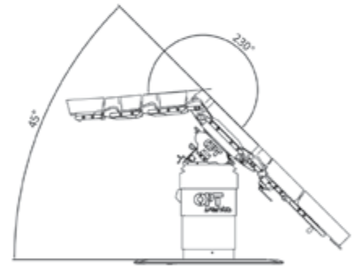


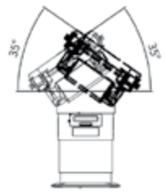












Tolerance +/- 2° on angular movements and +/- 3 % on linear movements.
Operating table with the column code 880200001 and table top code 881200001.

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.

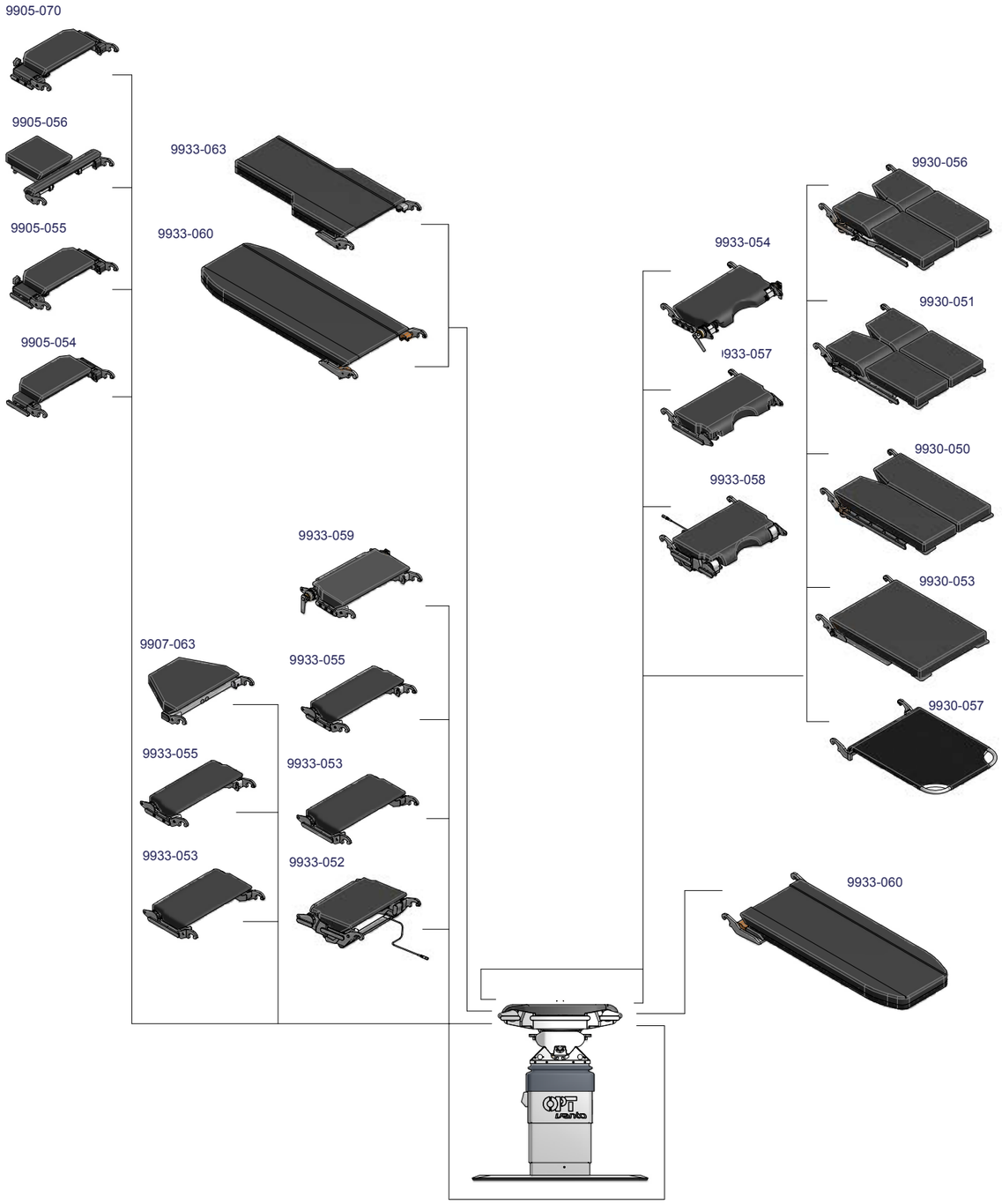
VANTO // has been designed according to **passive safety** principles (a reliable, solid and efficient product) and to **active safety** principles (devices which prevent and avoid any errors caused by misuse).

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, 2014/30/UE, 2014/35/CE, 2011/65/CE, 2014/53/UE (RED)** 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

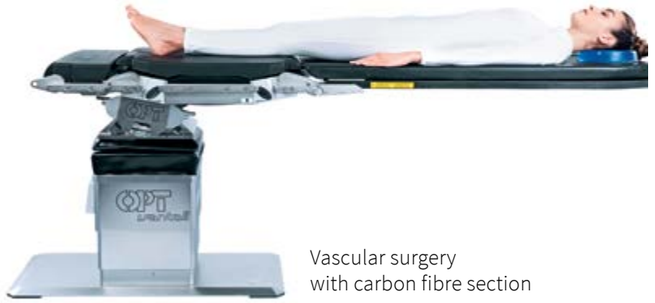
Abdominal surgery

Kidney surgery in lateral decubitus
(flex position)

Gynae-uro-procto
in lithotomy position

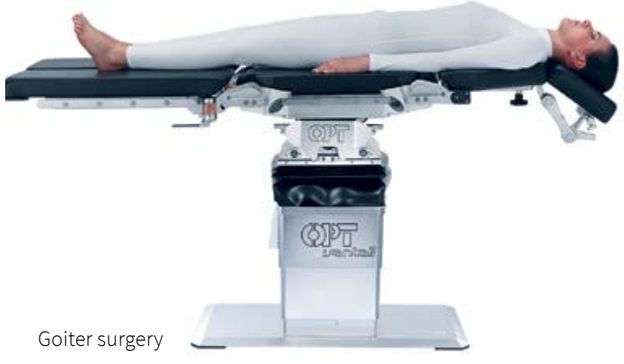
Lithotomic surgery

Lithotomic surgery
with instrument tray



Vascular surgery
with carbon fibre section

Thyroid surgery



Goiter surgery

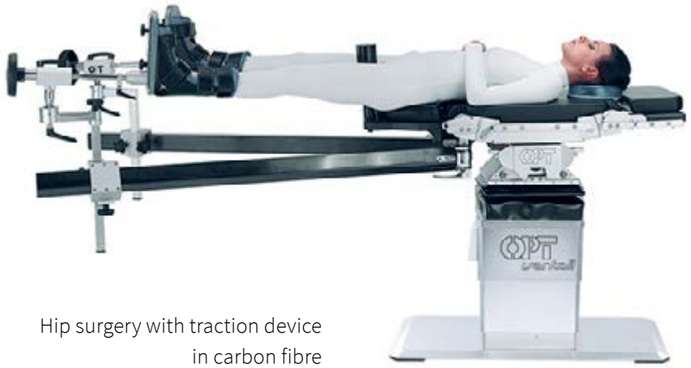
Shoulder arthroscopy in lateral decubitus

Shoulder surgery in beach chair position

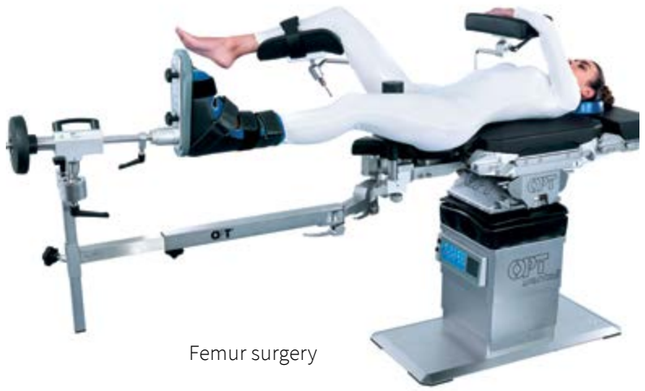
Shoulder surgery

Hip surgery in lateral decubitus

Knee arthroscopy



Hip surgery with traction device
in carbon fibre



Femur surgery

Tibia surgery

Skull surgery in prone decubitus

Supine decubitus

Skull surgery in beach chair position

Spine surgery in genupectoral position

Skull surgery in park bench position

Spine surgery in prone decubitus

Column stabilization

LAY OUT

Sections configuration:

COD. XXXX-YYY M section with MARTI cushion
COD. XXXX-YYY P section with PUR cushion (VELCRO)
COD. XXXX-YYY with COD. XXXX-YYY S for moulded cushion
COD. XXXX-YYY with COD. XXXX-YYY V for viscoelastic cushion

9933-060 [M-P]
9933-063 [M]
9905-068 [P]
8897-000 [P]
8830-000 [P]
9927-053
8897-101-00 [P]
9923-069 [M]
9923-067 [M-P]
9923-076 [M]
9933-060 [M-P]
9905-070 [M-P-S-V]
9905-056 [M-P]
9905-055 [M-P-S-V]
9905-054 [M-P-S-V]
9907-063 [M-P-S-V]
9933-062 [M-P]
9933-055 [M-P-S-V]
9933-059 [M]
9933-055 [M-P-S-V]
9933-053 [M-P-S-V]
9933-053 [M-P-S-V]
9933-052 [M-P]
8833-000 [P]
8811-000-01 [M-P-S-V]
8812-000-01 [M-P-S-V]
9933-054 [M-P]
9933-057 [M-P-S-V]
9933-058 [M-P]
9930-056 [M-P-S-V]
9930-051 [M-P-S-V]
9930-060
9930-050
9930-061 [M-P-S-V]
9930-053 [M-P-S-V]
9930-057 [M-P]
9923-065 [M]
9918-003
9918-004
9923-066
9923-071
9923-052 [M-P]
9923-049
9923-077
9920-026

XX = __ - VANTO (I)
XX = 01 - TOP (with Display)
XX = 02 - BASIC (without Display)

9920-028
solo per VANTO (I)

8803-000-XX
8849-002
8802-000-XX
8805-000-XX

8800-015
8800-025
9926-016
8805-A22
9926-016
8805-012
9927-019
9927-034
9927-035

6894-000
6884-000
6874-000
9920-034
9920-009
8840-000
8850-000
8860-000

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July 2019 Edition

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