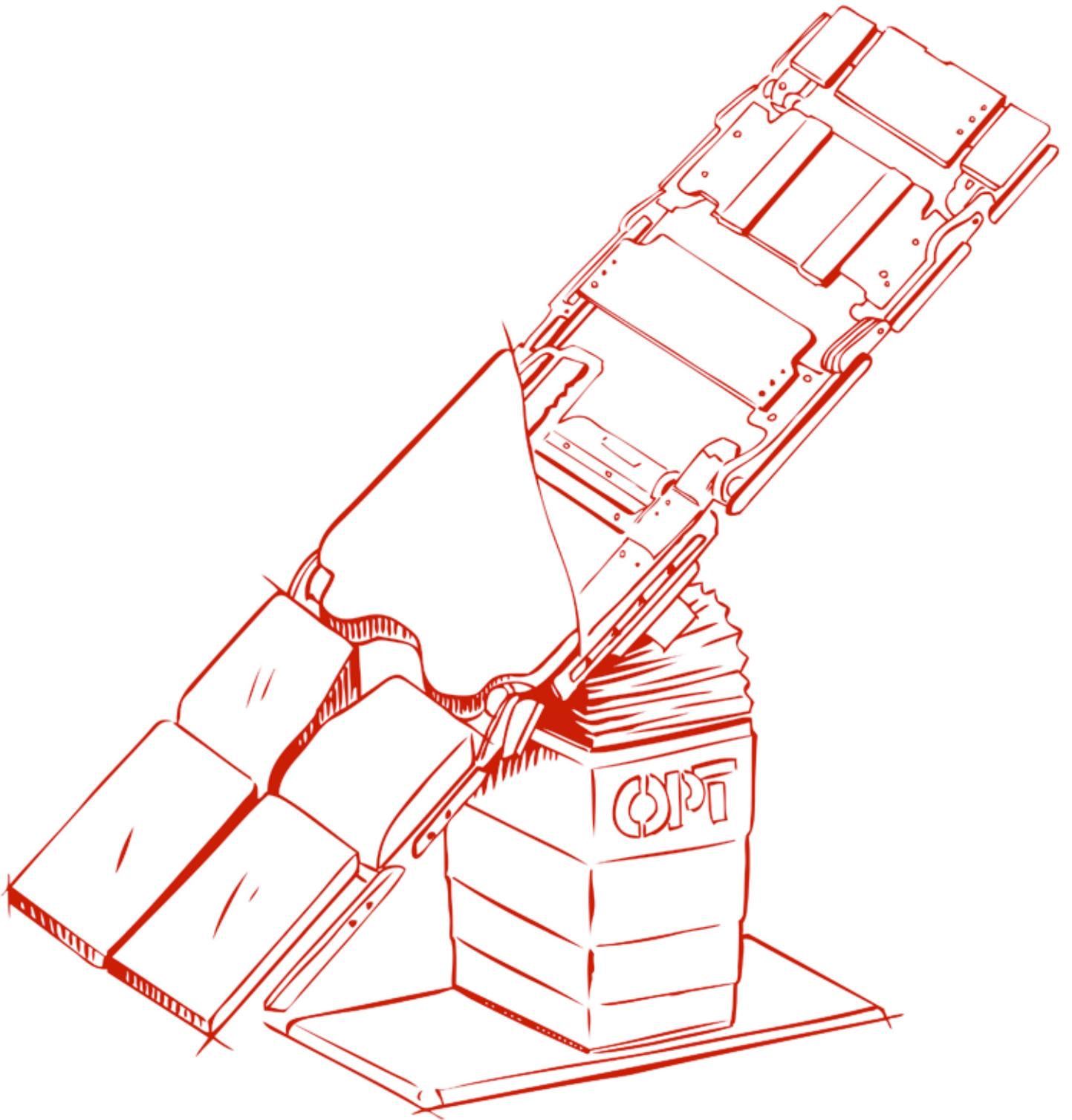


**CPT**

SurgiSystems



**century®**

OPERATING SYSTEM  
WITH TRANSFERABLE TABLE TOPS

**century**<sup>®</sup>



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 more than 90 years the company has improved the patient's quality of life by manufacturing ideal electro-medical high-end equipment. The long experience in this field leads to the creation of medical devices designed for the global market and able to meet the needs of healthcare professionals all over the world and facilitate their work.

The company manufactures products which confronts themselves with state-of-the-art global surgery. We satisfy the clinical needs with our technological, innovative devices designed with the highest reliability.

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](http://www.opt-ita.com)



## From tradition to innovation

The operating system with transferable table tops CENTURY summarizes all the technology and know-how acquired by OPT in more than 90 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 **simple and immediate in its use**.

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

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

- 1. Care for the patient:** CENTURY ensures maximum comfort even in case of long lasting interventions thanks to anti-decubitus cushions and to silent and smooth electrical movements, which improve the patient's comfort and safety.
- 2. Care for OR operators:** CENTURY 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 CENTURY system allows to organize a better logistics in the multidisciplinary operating rooms. It also leads to a significant time reduction and a smarter space management in the OR.

## A SMART operating system Making the complex things simply

### Simplicity

CENTURY 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 picking of the table top and/or the entire system with the help of trolleys. **The anti-collision safety system** of the outer casing of the table top allows the user to make any required position safely. Furthermore, the CENTURY 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 CENTURY has a **completely modular table top version**. It is composed of a single central section to which numerous components (head, leg and other sections) can be added. Moreover, the table top also boasts a wide range of accessories that satisfy the needs of every surgical discipline.

### Automation

CENTURY table top has electrical movements of all its components and a sophisticated software that fully respects the safety of both user and patient. It is able to **automatically recognize** patient's orientation and to detect the type of sections that are being added with the consequent regulation of the movement degrees and the activation of the anti-collision system of the single sections.

In addition the system automatically adjusts the movement speed if particular sections have been added.

### Radiolucency

The table top is completely **radiolucent on its entire length**. Therefore, it allows a rational and easy use of the C-Arm and radiography examination which is possible also due to the longitudinal shift of the table top. The vascular table top and the carbon fiber sections allow for a 360° radiolucency.

### Technology

CENTURY is designed with **cutting-edge technological solutions** that meet the needs of both surgeon and patient. To achieve the best performance in terms of safety, CENTURY offers the possibility to set a **security protocol** according to the specific requirements of the surgical operation. Moreover, CENTURY is complete with the most innovative security systems that protect from any unexpected errors.

## COLUMN *Three types of column for any necessity*

The column and the base are made in **stainless steel** and **noble materials** of highest quality. They are 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 is electro-hydraulic and contains all the electrical and mechanical components designed for the system functioning, **including the power supply**. Therefore, there is no external power supply that could disturb the operators even in case of discharged batteries.

The control panel integrated into the column controls all movements of both table top and column. In addition, there are luminous indicators of the battery charge status and of the correct data transmission.



### 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 a better patient positioning for any type of the surgery. The remote control manages the **electric blocking system** of the column.



### Mobile Plus Column

The column Mobile Plus has **two wheels integrated to the column base**, which allow to transfer the system without using the standard trolley. An auxiliary removable **mini trolley** can be used for intraoperative movements or minor adjustments before, during or after the surgery.

## TABLE TOP *Flexibility and universality*

The operating table top of the system CENTURY 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.

### Modularity

The operating system CENTURY has two versions of the table top:

1. The **standard version** consists of a central section with an **integrated lower back section**, to which numerous components (head and leg sections, elongation plates) can be added
2. The **completely modular version** consists of **a single central section** to which extension components (head, leg sections and elongation plates) can be added

CENTURY allows to configure the table adding the sections from both sides according to the needs of the OR staff.

The system **automatically recognizes the patient's orientation and the configuration setting**. Moreover, CENTURY can realign simultaneously the leg and back section during the self-levelling movement.



Standard version



Completely modular version

**Bariatric surgery  
(for obese patients)**

The exceptional load capacity of CENTURY is **453 kg (1000 lb)**.  
The system allows to operate obese patients even in extreme positions using the universal table top.



**TROLLEY** *Agility in movement*

The operating system CENTURY has **3 types of longitudinal trolleys** (head side and foot side insertion) to move only the table top or the entire system (column and table top). This distinctive feature allows an optimal patient management during the peri-operative procedure.



The trolleys are made entirely of electro-polished **stainless steel**. They allow to remove only the table top or the entire system from the head side or from the foot side. They are easy to handle thanks to a 5th wheel (optional) which can be activated by an innovative pedal system.

The longitudinal trolleys are available in **three versions**:

- Standard trolley
- Trolley with Trendelenburg and Reverse Trendelenburg
- Trolley with adjustable height and with Trendelenburg and Reverse Trendelenburg



**Main features**



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

The standard cushions of the operating table top are made in **soft, radiolucent, anti-static, 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 is **anti-decubitus**, easily removable and of maximum comfort for the patient. All 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 without having to move the patient. This is possible thanks to the **longitudinal shift** of the table top. The addition of carbon fibre sections allows for a **360° radiolucency**.



**Unique attachment system of the table top sections**

All the removable sections of the table top CENTURY 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.



**Electropolishing**

The **electropolishing procedure** is 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 and the trolley can be washed in the washing tunnel (protection against water jets: IPX6).

## CONTROL SYSTEMS

New wired and wireless remote controls with display



### Total control of the table in one hand

OPT adds to its line of **wireless** and **wired 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 and wired remote controls it is possible to make **all electrical movements** of the operating system CENTURY (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 and wired remote controls with LCD display are:

- Safety protocol setting for the obese patients' management
- Visualization of all electrical movements of the system and movement degrees
- Automatic detection of sections attached to the central module of the table top
- Indication of the table top orientation on the column
- Visualization of the charging status of both remote control and battery of the system
- Information on the status of the operating system and warning through descriptive alarm messages
- Setting and selection of five different 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.

CENTURY 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 CENTURY 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, CENTURY remote 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 panel



CENTURY column has an integrated control panel, which can also be used as an **emergency control**. It can activate all the column and the table top movements without the use of any wired or wireless remote controls.

Foot switch



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

Emergency Systems



**MPC System** is an exclusive emergency device that allows the movement of the sections when they are installed on the trolley. This allows to position the patient in advance and thus reducing preparation time between the operations.

Moreover, this emergency system can also be used **to move the table top on the column** in case of failure in the electronics by connecting it to the table top.

**Auxiliary Emergency System** is an emergency device for the column movements in case of failure in the electronics.

Using the **MPC System** together with the **Auxiliary Emergency System** it is possible to complete the surgery intervention.



## TECHNICAL FEATURES

*Know-how acquired in more than 90 years  
of experience*

### Modularity and flexibility

The extreme modularity of CENTURY 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 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

An integrated remote panel, placed on one side of the column, allows to perform all electrical movements of both column and table top. In addition, there are luminous indicators of the battery charge status and of the correct data transmission.

### CLEAN button

The integrated remote panel has a CLEAN button – by pushing it, the system raises the column until its 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.

### Ultra-flat base

The ultra-flat base of CENTURY 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 CENTURY has a sophisticated **anti-collision system** of the table top that prevents from crashes against the floor.

## PERFORMANCES

### *Extreme positions with simplicity*

To ensure an optimal exposure of the surgical site, CENTURY offers the opportunity to reach the most extreme positions with respect to the safety and comfort of both patient and user.

CENTURY has electro-hydraulic column movements and electromechanical table top movements, completely independent from one another.

#### **Electro-hydraulic movements**

- Height variation (without cushions): 665/1120 mm
- Trendelenburg / Reverse Trendelenburg:  $\pm 33^\circ$
- Bilateral tilt:  $\pm 25^\circ$



#### **Electromechanical movements**

- Longitudinal translation of the table top: 390 mm (completely electromechanical)
- Lower back section inclination:  $+ 90^\circ / - 50^\circ$
- Thorax flex:  $+ 90^\circ / - 50^\circ$
- Kidney flex:  $+ 90^\circ / - 50^\circ$
- Leg section indication:  $+ 90^\circ / - 90^\circ$  (independently right or left leg section or together)
- Flex - only one button for two simultaneous movements (Reverse Trendelenburg / back section)
- Reflex - only one button for two simultaneous movements (Trendelenburg / back section)
- Self levelling - zero automatic position with simultaneous realignment of all movements, in order to speed the maneuver and especially to avoid trauma to patients.

#### **Manual movements**

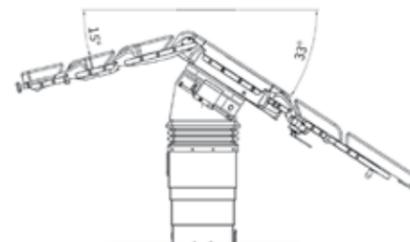
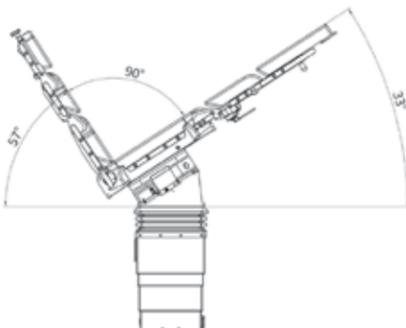
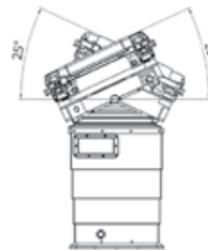
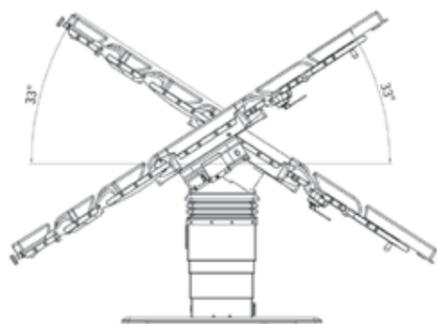
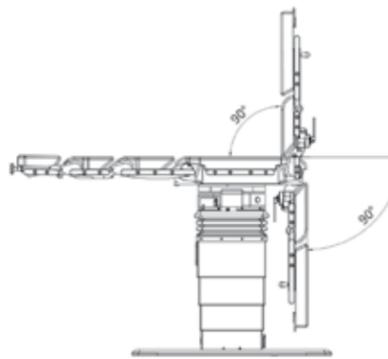
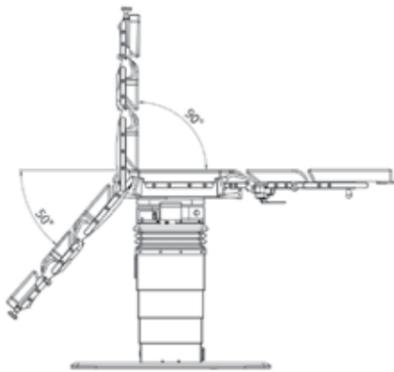
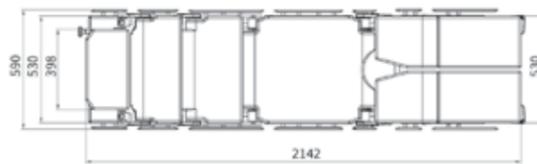
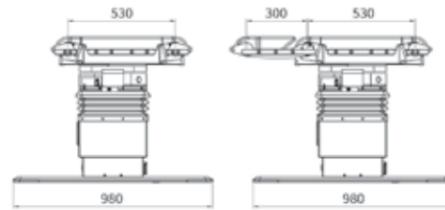
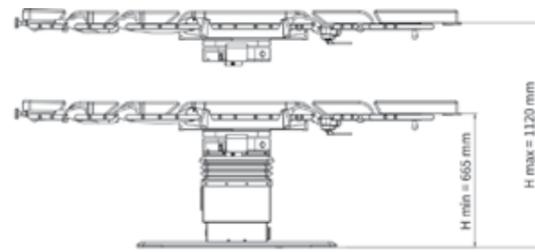
- Head section inclination:  $+ 53^\circ / - 53^\circ$  (tiltable without adjustment at  $-90^\circ$ )
- Upper back section inclination:  $+ 60^\circ / - 90^\circ$  (with tiltable section)
- Leg section spread:  $180^\circ$  (leg sections in 2 or 4 parts)

#### **Noise reduction and fluidity in movement**

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



## TECHNICAL DRAWINGS



## TECHNOLOGY AND SAFETY

*Full safety for operator and patient*

### Integrated operating rooms

CENTURY can be used in the integrated operating rooms and theaters.

### Automatic detection of the table top orientation

Thanks to special sensors, CENTURY automatically detects the position of the head and leg sections (or 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

CENTURY 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.



### Obese patients' safety

CENTURY allows its users to set a safety protocol for obese patients' management according to needs of the surgical procedure and the patients' weight or height.

### 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 tranquillity as well as on the safety of the operators working in the OR.

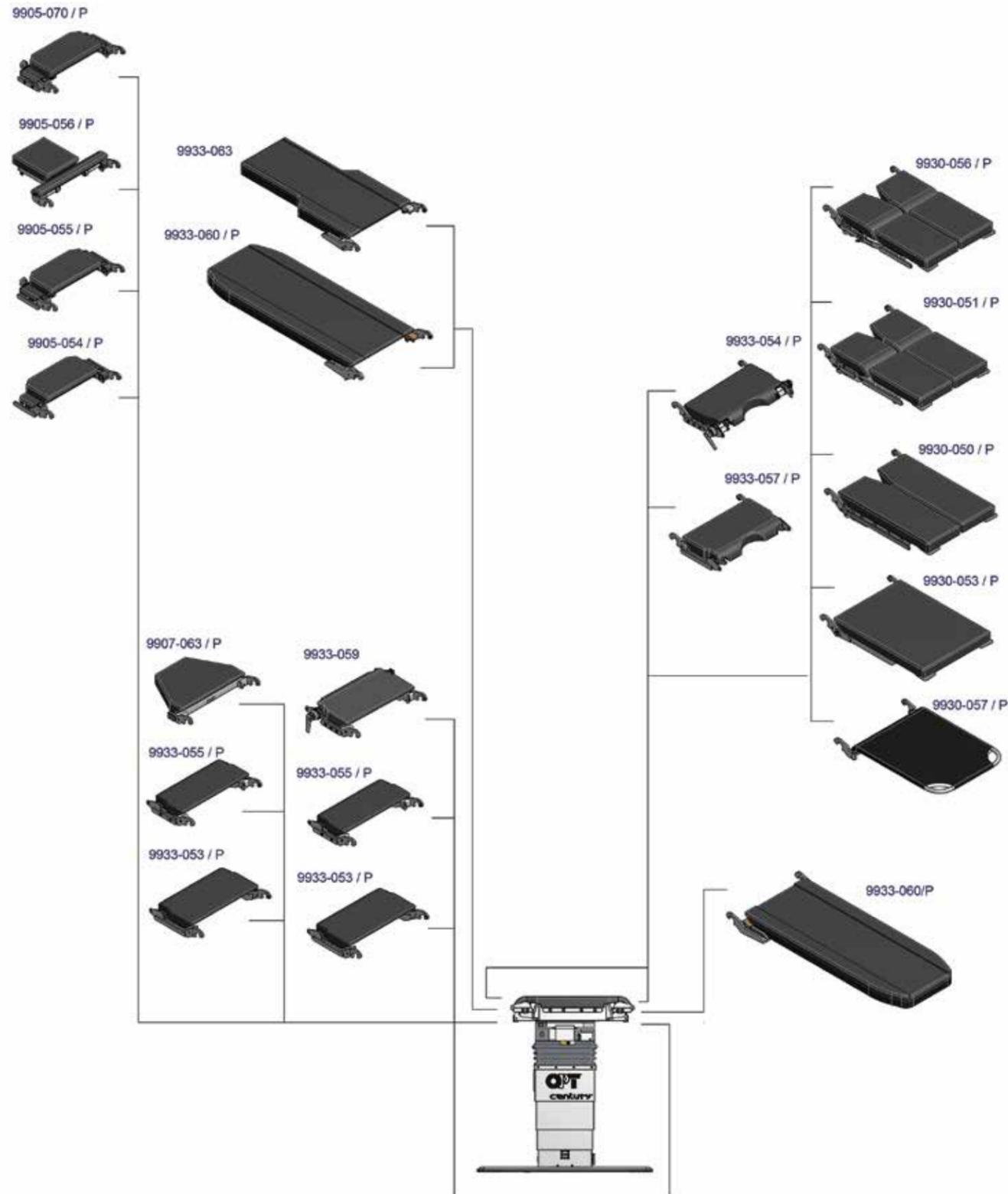
CENTURY has been designed according to passive safety principles (a reliable, solid and efficient product) and to active safety principles (devices which prevent and avoid any errors caused by misuse).

### 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 and 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 table CENTURY 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.





Technical drawing of CENTURY with the different configurations of the completely modular table top (code 8712000)

GENERAL SURGERY



Laparoscopic surgery in supine decubitus



Thorax surgery in lateral decubitus



Colon surgery



Abdominal surgery



Kidney surgery in lateral decubitus



Vascular surgery with carbon fibre section



Gynae-uro-procto in lithotomy position



Lithotomic surgery



Thyroid surgery



Lithotomic surgery with instrument tray



Goiter surgery



Hand surgery



Shoulder surgery in beach chair position



Hip surgery in lateral decubitus



Knee arthroscopy



Tibia surgery



Femur surgery with double traction device



Hip surgery with traction device in carbon fibre



Trolleys for traction device



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

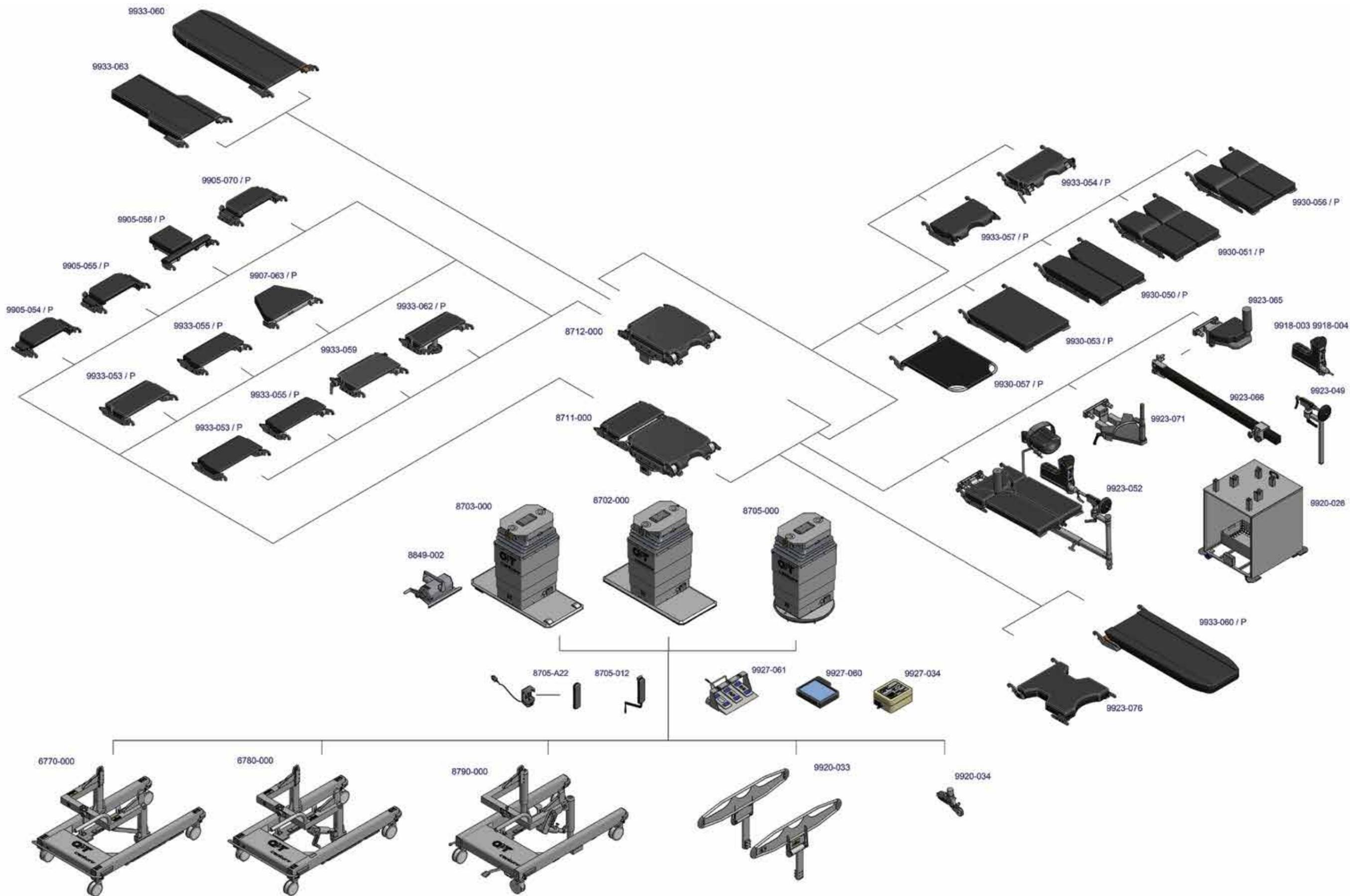


Spinal surgery in prone decubitus with Wilson device



Pediatric surgery

# LAY OUT





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