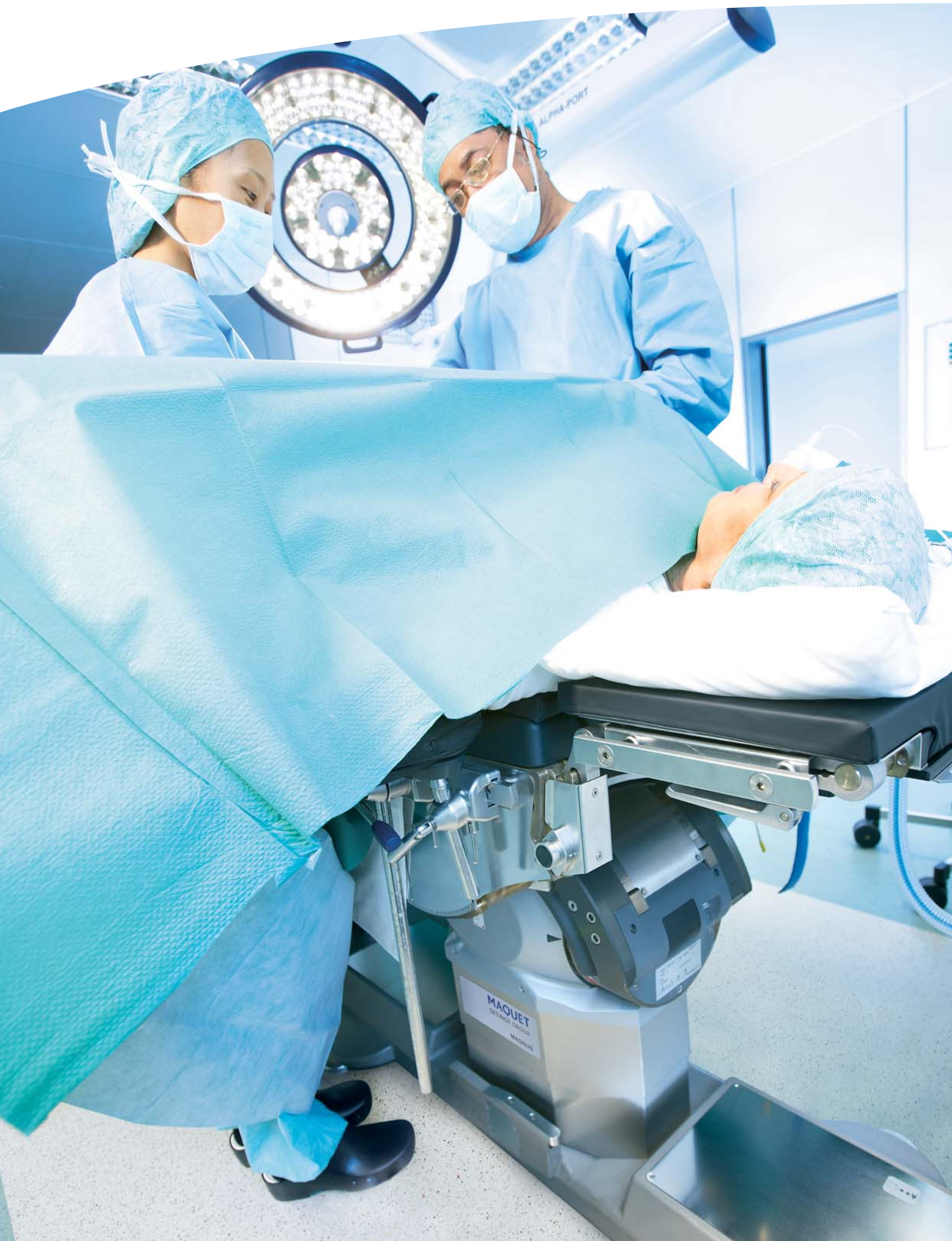
MAQUET
GETINGE GROUP

A CLASS OF ITS OWN
MAGNUS OR TABLE SYSTEM

SURGICAL WORKPLACES


ALPHA PORT
MAQUET
GETINGE GROUP
MAGNUS

ONE SYSTEM FOR ALL APPLICATIONS
MAQUET – THE GOLD STANDARD

Modern system solutions: The procedures that are carried out every day in clinical practice can no longer be seen in isolation. Efficient workflows demand that operational equipment and work processes are optimally matched to each other. The MAGNUS OR and transport system is an integral component of a closely dovetailed logistics system. Coordination and ergonomics for the user and comfort for patients are just as important as the commercial aspects.

The goal is efficient and gentle patient treatment, an ideal working environment and an optimum in-house workflow. With the MAGNUS OR table, MAQUET designed a system, which links patient care, the operating area, diagnostics and post-operative care much more closely. And that benefits both patients and users.

MAQUET – The Gold Standard.

A CLASS OF ITS OWN
MAGNUS OR TABLE SYSTEM

MAGNUS links functional areas: In addition to the actual operation, preparation, transport and post-operative care play a further significant and logistically complex role in all surgical disciplines. For this reason, MAQUET has been working for decades on solutions to integrate the individual fields and their different challenges into a variable and comprehensive system. The MAGNUS OR table system is the convincing culmination of these efforts. With its special chassis frame and the compatible transfer board, MAGNUS enables the patients to be transferred gently from their bed to the operating table top. The electrically adjustable table top ensures the transport to the operating theatre or diagnostic centre in a position appropriate to the needs of the patient. Until the table top and the patient are finally transferred by the MAGNUS table column automatically and without any further stress.

MAGNUS extends the operative spectrum: Particularly in minimally invasive surgery, extreme positions are often required in order to provide an optimum exposure area using gravity. Here, MAGNUS is setting new standards, with slope angles of up to 80° and tilt angles of up to 45°, which can also be combined. Together with modules that have been designed specifically to work with each other, this opens up almost unlimited positioning options as well as new and ergonomically optimised surgical working methods.

- The Easy-Click system and the various positioning modules ensure maximum flexibility
- Special cushioning provides excellent pressure release
- Intuitively operated hand-held controller ensures fast and uncomplicated intra-operative repositioning
- The slope saddle technology of the table column provides extreme slope angles and maximum positioning freedom for optimum radioscopy

Thanks to the Easy-Click technology, it just takes a single hand movement to interchange the MAGNUS modules, easily and safely.

Pressure relieving cushioning is easy to clean and does not impede x-rays

Intuitive, hand-held controller with back-lit key panel and extensive position memory

The MAGNUS OR table column allows extreme slope angles which enable the table top to be extended a very long way for X-ray examinations, both cranial and caudal.

MAGNUS sets new standards in terms of mobility and flexibility.

MAGNUS guarantees flexibility and ergonomics: A significant improvement in working conditions and patient safety.

ERGONOMIC WORKING CONDITIONS
ELEVATED POSITION

Upright and free of strain: The MAGNUS table top can be raised to a height of 1,315 mm. This allows surgeons to operate comfortably from a standing position, e. g. during a total hip replacement in the dorsal position. Non-tiring working conditions that provide relief from potential back strain, even during longer surgery.

ERGONOMIC WORKING CONDITIONS
LOWERED POSITION

Relaxed arms and shoulders: The extremely low setting of the MAGNUS OR table system ensures safe and stress-free operating, e. g. in minimally invasive laparoscopic interventions. A step stool is not needed.

TRANSFER-FREE PATIENT TRANSPORT
TRANSFER BOARD FOR DIAGNOSIS, SURGERY AND CONTROL

Fast and smooth transport: From image guided diagnosis through emergency treatment and first dressing and right into the operating theatre – the multifunctional MAQUET transfer board offers patient transport without having to transfer the patient. It has been developed in such a way that transfer is possible from the patient transporter to the operating table or into the computer tomograph, for example. This puts less strain on both patients and personnel and saves valuable time.

The transfer board made of carbon fibre or Kevlar provides the link between the ward and other departments. It completes the MAGNUS patient transport and positioning system. Both uninterrupted service and the smoothness of surgical processes are significantly increased.

Gentle for patient and nursing staff: Transport and transfer to the operating theatre or diagnostic and other departments, without repositioning

Vibration-free and without additional barriers, patients slide on the MAQUET transfer board from the transporter to the examination/operating table.

TRANSFER-FREE PATIENT TRANSPORT
TRANSFER BOARD FOR DIAGNOSIS, SURGERY AND CONTROL

Patient admissions

Patient transport

Carbon-fibre transfer board

Transfer board, suitable for operating table 1150.13 or 1180.13

Patient transport

Computer tomography

THE SYSTEM – EASY AND VERSATILE
FOR THE CHALLENGES OF TODAY AND TOMORROW

A perfectly co-ordinated system

MAGNUS allows for optimum positioning: The perfectly co-ordinated modular design of the operating table top provides functionalities and positional options that make both micro-surgical and complex interventions significantly easier and more flexible. The table system is ergonomically designed to facilitate relaxed working and deliver the best possible patient comfort, both for in-patient and out-patient applications. The combination of the innovative table column slope saddle technology, the extreme working radius and the optimised cushioning concept provides an overall system, which is already equipped to cope today with the requirements of the future.

Connecting bracket with standard mounting points for skull clamp and other head supports (1180.36A0)

Extension device 1180.19A0

Shoulder plate 1180.34A0

Torso support
1180.10A0

Motor-driven joint module set
1180.11B0

Double leg support, 4-part
1180.54A0

All modules are easily, quickly and safely connected by means of the Easy-Click technology. A single hand movement is all it takes.

FLEXIBILITY AND MODULARITY
MAGNUS OR TABLE TOP

MAGNUS facilitates all surgical interventions: Due to its perfect height adjustment, the OR table top contributes to relaxed working, both while standing and sitting. Extreme adjustment ranges, particularly for slope and tilt, facilitate and optimise patient positioning. This system feature offers levels of functionality that have never been achieved before.

Maximum adjustability – the new manoeuvrability in OR tables: The slope saddle concept supports even extreme table adjustments with angles that far exceed current standards. As a result, MAGNUS offers new possibilities, particularly with minimally invasive surgery. But other surgical disciplines also benefit from this new development. Today, MAGNUS is already designed for the future.

The modular, structural concept ticks all the boxes, when it comes to positioning requirements.

Extreme longitudinal position for intra-operative radioscopy and excellent freedom of access for the OR team. Positioning example: Nephrectomy in lateral position

Positioning example: Thorax surgery in lateral position

Genucubital position for intervertebral disc or rectal surgery with the 4-part standard leg plate (no special accessories required)

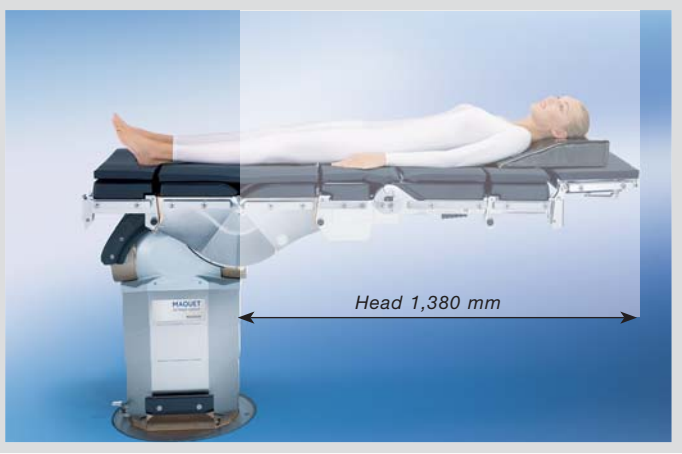
CUSHIONING AND RADIOSCOPY
MAGNUS CUSHIONING CONCEPT AND WORKING RADIUS

Best prerequisites for intra-operative radioscopy: Due to its extreme working radius, MAGNUS achieves a position where the patient is almost "floating", providing optimum radioscopy possibilities and free access to the surgical field from all directions.

Pressure-relieving positioning: In numerous studies on foam type and structure, height and cover material, MAQUET has developed operating table cushioning that offers maximum positioning comfort and patient safety. It provides a particularly efficient distribution of the pressure, reduced shearing forces and safe lateral support.

All cushioning can be removed without tools and is easy to clean and disinfect.

Maximum caudal working radius



Maximum cranial working radius

The height-adjustable table column provides an ergonomically suitable working position while seated.

Maximum height for working while standing

Comfort for the patient – working conditions that prevent potential back strain for surgeon and assisting staff

The core of the MAGNUS system: OR column with slope saddle technology

STABILITY – FOR SAFE OPERATIONS
MAGNUS OR TABLE COLUMNS

Mobile MAGNUS table column, manoeuvrable with transporter

Independently manoeuvrable OR table column with extendible castors

Extreme positions and optimum access: The OR table column is the core of the MAGNUS system. Its slope saddle technology allows for slope angles up to 80° with simultaneous tilt angles of up to 45°, ensures stable lateral tilt and provides optimum radioscopy conditions and free access to the surgical field, with a corresponding working radius. The OR table top can easily be transferred from the transporter to the table column without the need for repositioning. Less strain for the staff – more care for the patient.

Mobile OR table column: The mobile column can be moved by a transporter together with the OR table top and can be set down at any location. Power is supplied through maintenance-free batteries, which are integrated into the column base and last for at least one week of surgical work.

Independently manoeuvrable OR table column: This version is equipped with its own castors and can easily be moved without an additional transporter, even during surgery.

CONTROL AND POSITIONS
MAGNUS HAND-OPERATED CONTROLLER

Intuitive operation – easier than ever: The MAGNUS hand-held controller is fitted with a display and self-explanatory icon keys, which facilitate fast and intuitive handling. Up to ten different patient positions can be stored and recalled from the integrated program memory. Intermediate storing is also possible, e. g. when using an intra-operative C-arm in the flat position and then returning to the operating position. The display, which is available in various language versions, provides useful status information and indicates possible operating faults, as required. Moreover, the back-lit key panel considerably simplifies work in a darkened endoscopy room. Using an infrared signal or cable, the hand-held controller ensures safe operation of the OR table system even during critical phases of surgery.

Intuitively recognisable icons on the hand-held controller. Back-lit keys ensure comfortable and safe working in a darkened operating theatre.

MOVABILITY AND VARIABILITY
MAGNUS TRANSPORTERS

Technology for the logistic challenges of modern clinical procedures

Fast, safe and comfortable-in-use for the nursing staff: Transporters with additional functions are the future-proof response to the growing requirements of clinical procedures. Because of its special chassis frame and the electrically adjustable table top, MAGNUS simplifies the transport of seated and recumbent patients within the operating theatre.

Easy handling – safe manoeuvring: The MAGNUS transporter has various castor settings: Tracking wheels for stable straight-line travel, four movable castors for lateral movement or locked castors for a safe parking position. It can be activated or deactivated easily and ergonomically through a foot lever.

POSITIONING AND ERGONOMICS
MAGNUS TRANSPORTERS

Supporting patients and staff alike: Simplifying repositioning, protecting the back muscles of the staff and optimally supporting patients during every phase of surgery with coordinated positioning options. MAGNUS exceeds the possibilities of an OR table and is the lynchpin of modern OR proceedures. The MAGNUS patient table top can also be adjusted on the transporter using an electric motor.

Whether the patient is in the "shock position“ or "head down“ for a comfortable initial phase or with the back plate in the upright position, e. g. in spinal anaesthesia or to support the patient's respiration post-operatively, the MAGNUS transporter always remains independent and flexible with its lithium-ion battery and ensures ideal patient care at every stage and at every location, inside or outside the operating theatre.

Simple, back-friendly operation of the various castor settings, through a foot lever

Independent power supply through a high quality and completely stable lithium-ion battery

POSITIONING EXAMPLES
DORSOSACRAL POSITION

MAGNUS facilitates the most versatile positionings for an optimum and ergonomically suitable access to the surgical field.

MAGNUS is electrically adjustable with extreme slope angles and easily extendable with various additional devices.

Preparation in gynaecology: Initial phase with transfer board

Intervention in dorsosacral position – motor-driven leg holders

POSITIONING EXAMPLE
NEUROSURGERY

The length of the back plate can be adjusted to accommodate different patient sizes.

POSITIONING EXAMPLES
GENUCUBITAL POSITION

Preparation and positioning for spinal and rectal surgery. The slope saddle technology and the modules provide a comfortable position for the patient and optimum access for the surgeon.

POSITIONING EXAMPLES
SPINAL SURGERY

Spinal surgery in prone position with optimum access for the C-arm

Spinal surgery with a plug-in spinal column positioning device. Optimum radioscopy of the spinal column – ap and 360°

POSITIONING EXAMPLES
SUPINE POSITION

Maximum head down position up to 80° with simultaneous lateral tilt up to 45°

Stable position even with extreme tilt

Position with optimised gravity, e. g. for bariatric surgery or fundoplication

Positioning example: Low foot setting approx. 50°; maximum up to 80°

Knee arthroscopy with free-hanging lower leg

Struma surgery with relaxed neck positioning

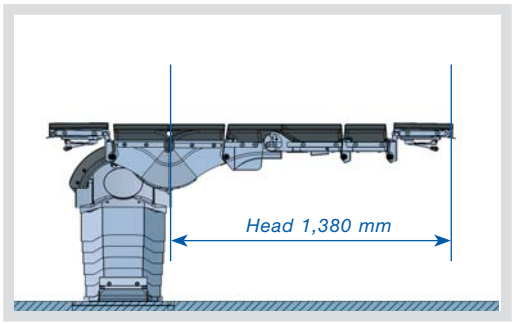
Laparoscopic and conventional cholecystectomy: optimum access to the operating field

Minimally invasive total hip replacement with extension device

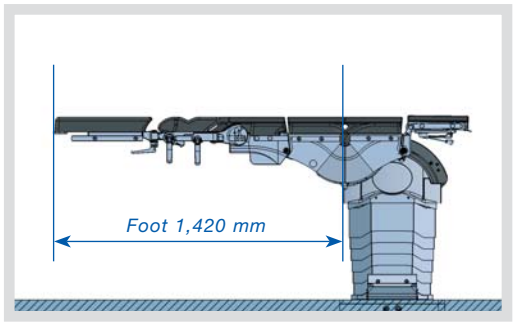
Care of femoral neck fracture with extension device

Note: All illustrated patient positions are only examples and incomplete from a nursing / medical viewpoint. If required, additional accessories should be used for patient safety, e.g. body support or vacuum mattresses.

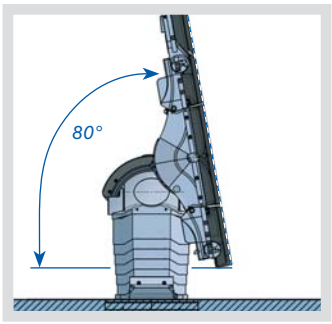
TECHNICAL DESCRIPTION



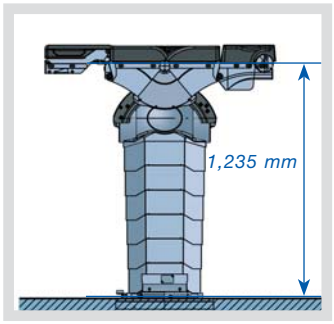
Radioscopy access with positioning in head direction



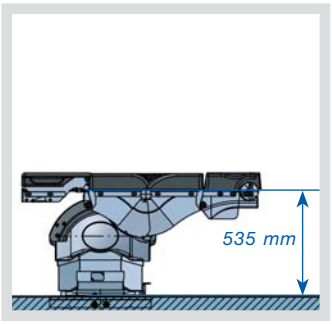
Radioscopy access with positioning in foot direction



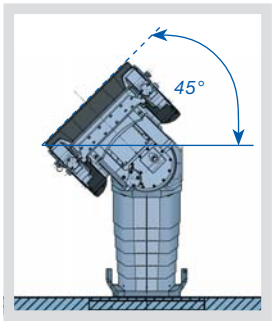
Foot down/head down tilt, max. 80°



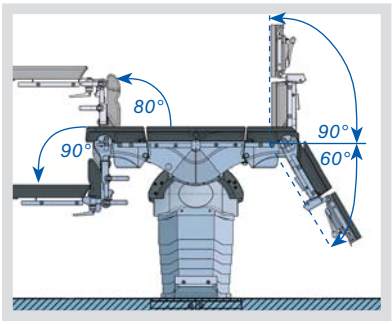
Highest position without cushioning



Lowest position without cushioning



Left/right tilt: max. 45°



Back plate position: up/down +90°/-60°,
Leg plate position: up/down +80°/-90°,
Lower leg plate: up/down +90°/-90°

MAGNUS OR TABLE COLUMN

- OR table column for mounting system-compatible operating table tops
- Adaptive transfer: Table column automatically recognises the transfer position and guides the column head accordingly
- Electronically driven column
- Transfer of the operating table tops from both sides and with free selection of orientation of head or foot first. Automatic recognition of orientation direction of the operating table top on the column and corresponding allocation of the functional keys on the control units
- Horizontal alignment of the column head (post-operative), either by activating the zero position function through the hand-held controller or by positioning the transporter and activating the "Height up/down" column function
- Activation of the motorised movements of the OR table system using the infrared hand-held controller, cabled hand-held controller or foot lever as well as through the additional operating panel, which is integrated in the OR table column
- Two splash-protected plug-type connections for the parallel connection of cabled hand-held controller and foot lever
- Column casing made of stainless steel

AVAILABLE IN FOUR VERSIONS

1180.01A0 Stationary version for installation into built-in base plate 1120.98A0 or 1150.98A0

- Liquid-tight installation, flush with upper edge of finished floor; can be rotated through approx. 350°; can be locked in any position
- Power supply to the operating table column through stationary transformer unit with battery buffer

1180.01B0 Stationary column with floor mounting plate for installation on finished floor

- Power supply, same as 1180.01A0

1180.01C0 Mobile column, can be moved with transporter

- Power supply for the operating table column through maintenance-free batteries, integrated into the base plate; operating capacity between two charging cycles, approx. 1 OR week
- Batteries are recharged and OR table column is operated through a mains supply, using a mobile transformer unit, which is included in the scope of delivery

1180.01D0 Independently manoeuvrable column , can be moved using the integrated castors and activated by the hydraulic pedal-operated pump

- Power supply, same as 1180.01C0

OR TABLE TOP

1180.10A0 Modular universal OR table top

- OR table top as symmetrically divided basic unit, with identical interfaces on both sides, allowing for individual configuration, depending on surgical requirements. Plug-in modules may be selected as required
- Table top has radioscopy window between the bars without crossbars, for intra-operative use of image intensifier
- OR table top frame and side rails (10 x 25 mm) made of stainless steel
- Radiolucent, 80 mm thick hybrid cushioning, with electrical discharging capacity The support plates can easily be removed for cleaning, without tools
- The central cushioning segment in a sandwich design, including wear-protection with visco-elastic foam and bi-elastic cover, offers excellent pressure distribution and reduces the shearing forces
- Electro-powered drive of the OR table top provides longitudinal shift (free-positioning for radioscopic examination with C-arm), as well as "Back plate up/down" and "Leg plates up/down"
- All drives with electronically controlled gentle start-up for jerk-free travel with every movement, providing maximum patient comfort.
- Return to the last stored patient position following C-arm control in modified patient position, using the hand-held controller
- Easy storing and recalling of up to 10 patient positions using the hand-held controller. Horizontal adjustment of all motorised table top segments, including OR column head through zero position function. The practical horizontal adjustment of the individual functions complies with medical requirements and avoids unfavourable intermediate positions for the patient.
- OR table top can be adjusted using plug-in modules (see below) for various specialist surgical disciplines or different patient body sizes. Mounting points for easy, safe adaptation of modules such as:
  - Motorised joint module 1180.11A0/B0
  - Standard back plate 1180.31A0 for general surgery
  - Extension plate1180.32A0
  - Transfer board as leg support for the initial phase in dorsosacral position 1180.57A0
  - Leg plates, divided into four, can be bent, spread and raised for genucubital position 1180.54A0
  - Shoulder module 1180.34A0
  - Carbon-fibre plate 1180.45A0
  - Extension plug-in device 1180.19A0
  - Dual-joint head rest 1180.53A0
  - Single-joint head rest 1180.50A0

  Very easy adaptation is ensured using a snap connector (Easy-Click system). Device is immediately held in place to prevent accidental loosening

EXTERNAL TABLE TOP CONTROL

- Optionally, the table top can be adjusted independently of the column on the transporter. This ensures compliance with nursing and anaesthesia requirements relating to adjustments of the patient position during the initial phase or in the recovery room.
- The table top can also be moved to the beach chair position on the transporter. This allows patients to be transported in a comfortable position, even over longer distances.

Technical specifications	
Length of universal table top:	
Head-side configuration with 1 joint pair, back plate, extension plate and head rest	1,952 mm
Length of universal table top:	
Leg-side configuration with 1 joint pair, head rest and leg plates	2,033 mm
Width of universal table top	540 mm
Width across side rails	580 mm
Radioscopy window between the bars	410 mm

Motorised adjustments	
Height (without cushioning)	
Stationary column	535 – 1,235 mm
Mobile columns	565 – 1,265 mm
Slope: head down/foot down	80°/80°
Tilt, left/right	45°/45°
Longitudinal shift	460 mm
Back plates up/down	+90°/-60°
Leg plates up/down	+80°/-90°
Max. patient weight incl. accessories	
Stationary columns	380 kg
Mobile columns	250 kg

Compliant with the directives of the applicable CE guidelines; classification in accordance with MPA Class I

WORLDWIDE AND CUSTOMER-ORIENTED
MAGNUS SERVICE AND TRAINING

Competent service: The MAQUET hotline service is available 24/7. The global Service Team is made up of experienced specialists, who will do everything they can to avoid or minimise downtime in the OR. In addition, regular maintenance by MAQUET engineers helps to increase the functional safety of our medical equipment.

First aid on site: The responsible hospital engineer can make an immediate, initial diagnosis using the Ethernet interface on the MAGNUS OR table system. In this way, any faults that may occur can often be repaired on the spot or important information can be gained for the MAQUET Service Engineer, which can facilitate the repairs and save costs. External fault diagnostics and software updates can also be done via the internet.

Fit for the future: As a centre for communication, MAQUET's Surgical Academy offers a number of special events on subjects relating to medicine, health policy and hospital management.

An exhibition hall with the complete product range, two auditoriums with multimedia equipment, four conference rooms as well as completely equipped and functional OR and intensive care rooms are part of the infrastructure of this worldwide unique facility.

Experts working with small groups in a workshop environment pass on valuable information concerning clinical procedures. Practical training material supplements this offer, e. g. an introduction to positioning for operations explaining surgical positioning step by step, for use in practical applications.

MAQUET's Surgical Academy in Rastatt

MAGNUS with Ethernet interface for rapid initial diagnosis

Competent contact partners at the other end of the phone

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