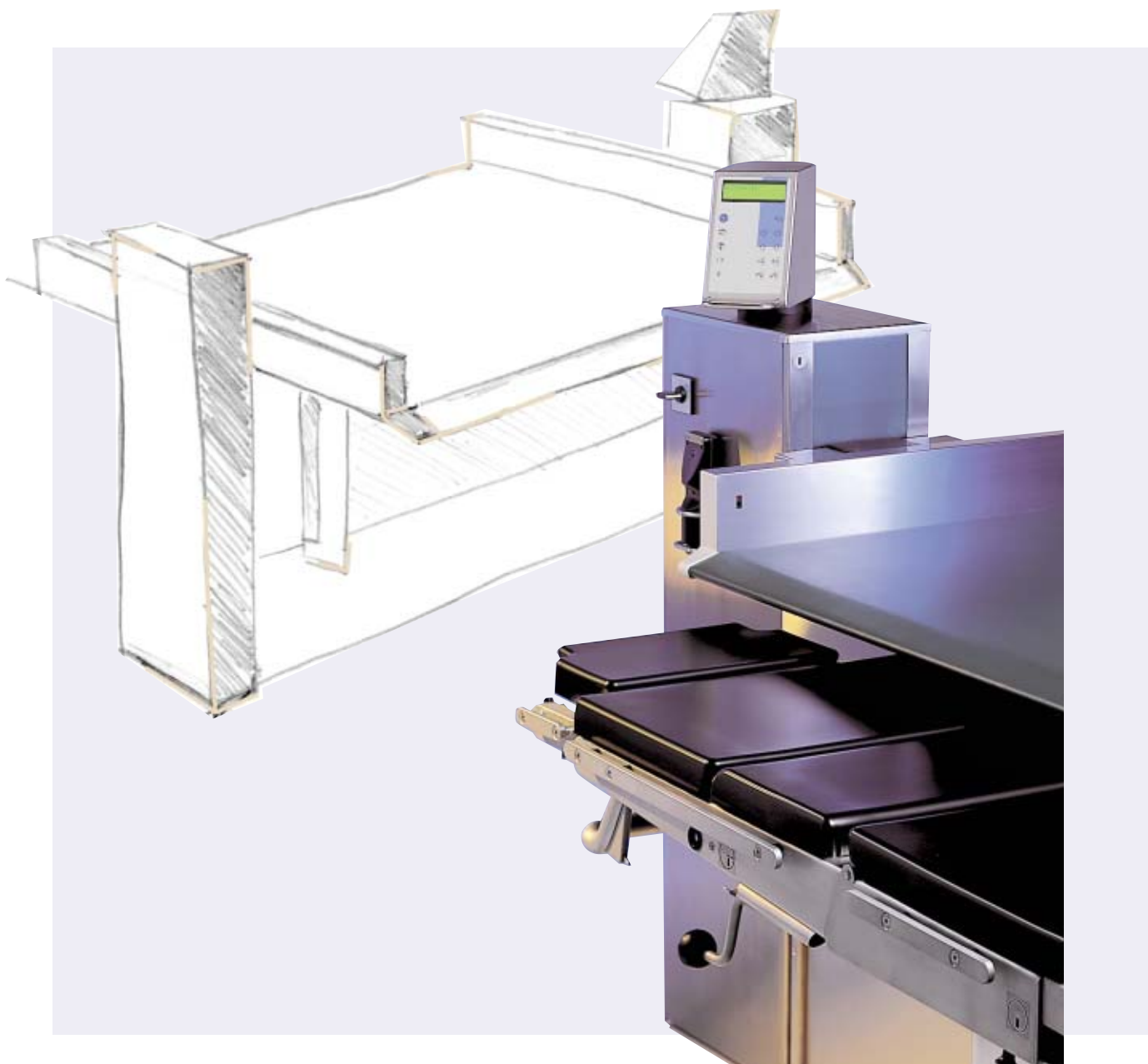


# Patient Transfer Unit ORBITER

Practical, Safe, Efficient



**TRUMPF**



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TRUMPF Medizin Systeme has decades of experience as a hospital equipment specialist. Recognized competence, intelligent innovations and functional design make **TRUMPF Medizin Systeme** products important aids. Development, design, production and service of **TRUMPF Medizin Systeme** is certified according to DIN EN 46001 - a guarantee for maximum quality and safety.



# ORBITER - Patient Transfer the Easy Way

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Exhausting manual patient transfer is a matter of the past.

The **TRUMPF Medizin Systeme** patient transfer unit is a stationary device for transferring patients at the interface between the sterile and non-sterile operating theatre areas. The patient is transferred mostly automatically from the bed to the operating table and vice versa. The staff just monitor the program sequence - assisted by comprehensive safety precautions.

**That is patient transfer the easy way.**

# ORBITER - The Transfer Procedure

## Automatic Patient Transfer

Patient transfer can be so simple. **With no physical strain for the staff, and safe and gentle for the patient.** With the **TRUMPF Medizin Systeme** patient transfer unit transfer into and out of the operating area is organized ideally. The procedures are plannable, and automatic control ensures effortless and fast transfer.

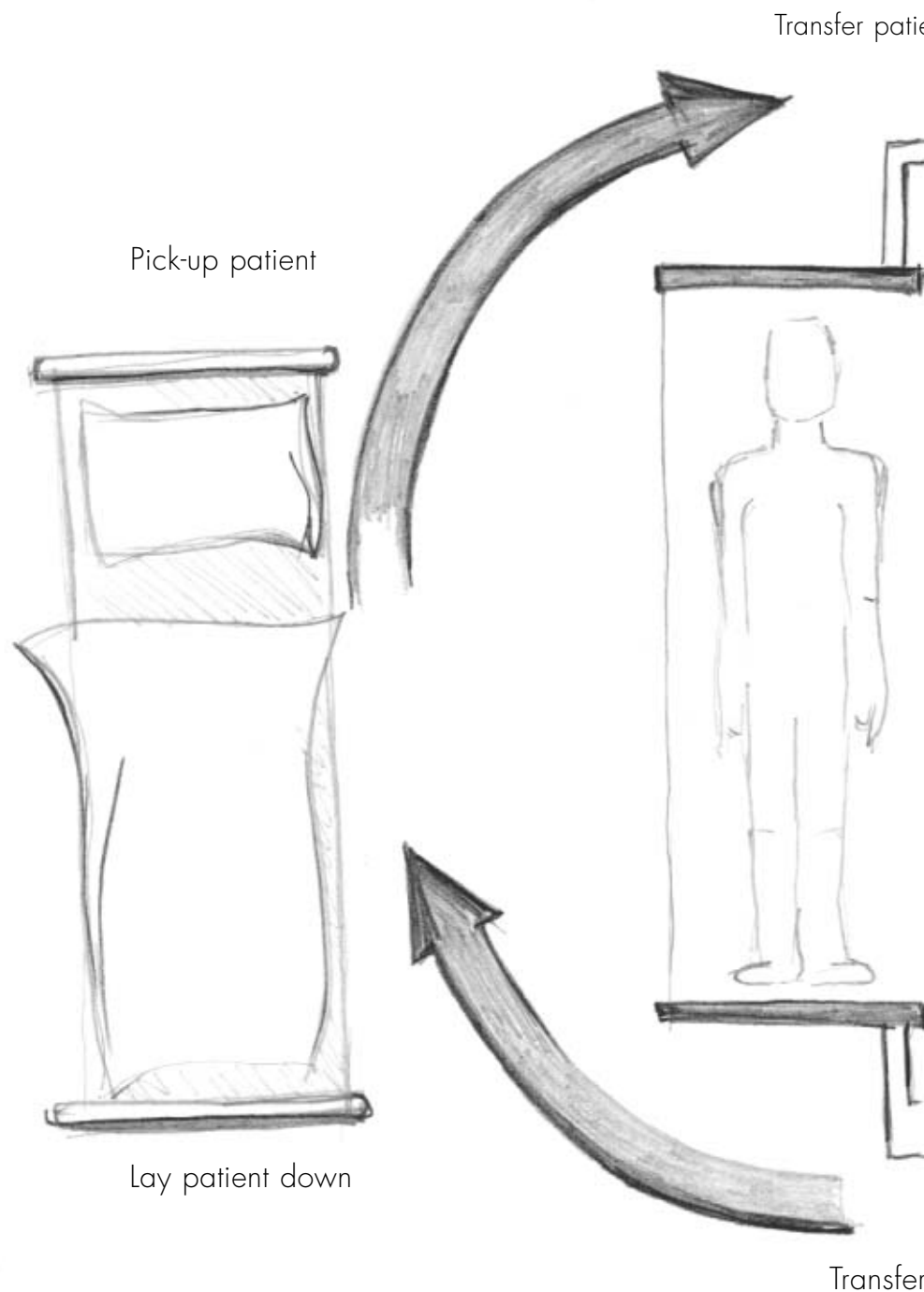
### Transfer from non-sterile to sterile area:

- In the non-sterile area the patient is still in bed and is moved to the transfer unit.
- Positioning of the operating table in the sterile area.
- The transfer unit lowers to the level of the bed.
- The patient is being picked-up.
- The patient is transferred to the other side of the transfer unit.
- The transfer unit moves to the level of the operating table.
- The patient is laid down onto the operating table
- If required the transfer unit can be raised to neutral position.

### ...and from the sterile to the non-sterile area:

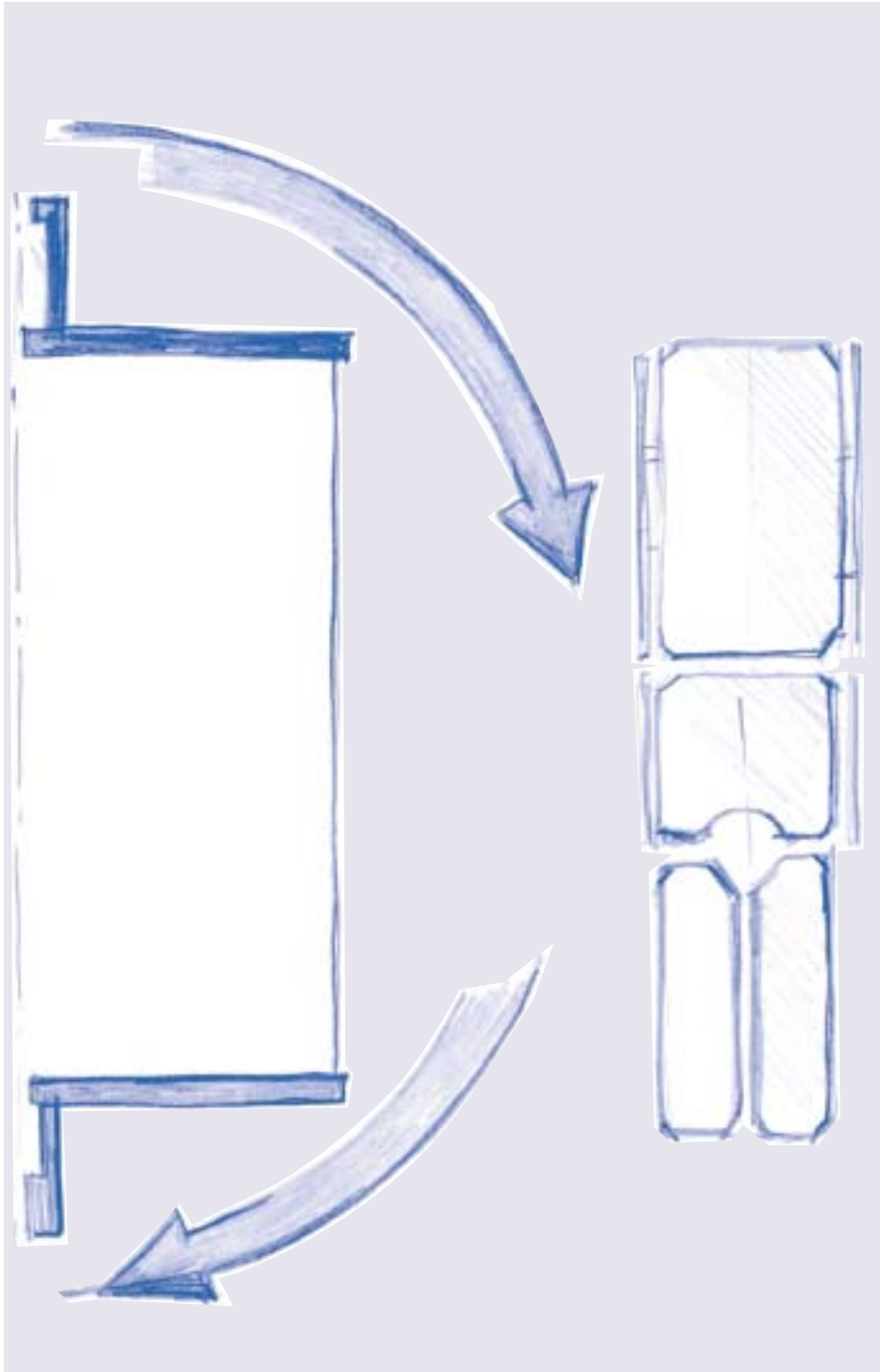
For transfer from operating table to bed the procedure is carried out in reverse order.

Non-sterile



# ORBITER - The Advantages in Detail

## Sterile



- **No physical strain** for personnel during patient transfer. Serious back injuries and associated problems are a matter of the past.
- **Every staff member can transfer any patient**, regardless of weight and stature.
- **Gentle transfer** – especially important with anaesthetised patients after the operation.
- **Efficient modern operating theatre timing** through precise spatial and temporal definition of working procedures. The creation of a reliable operating theatre plan, exact personnel planning and a high transfer frequency allow efficient capacity utilization.
- **Hygiene planning.** The patient transfer unit is a defined component in the hygiene chain between the sterile and non-sterile areas.
- **Quality management** - working procedures in the hospital are traceable, a fundamental requirement for DIN EN ISO 9000 ff certification.

# ORBITER - A Closer Look at the Technology

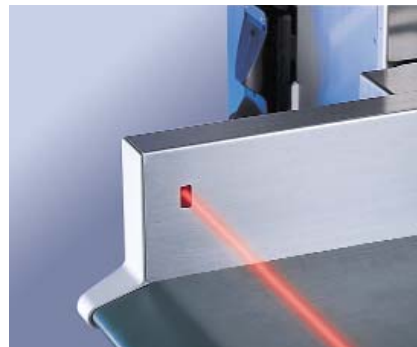
The functions are clear at a glance.

- The **display with plain text** is easy to understand. It guides the user simply, clearly and in almost every required language.
- The display is backlit and **easy to read - even at an angle**.
- The control block is **pivoted** and can be used perfectly from both sides of the transfer unit.



The interactive display guides the operator through the program and provides important information:

- **Current function status.** You always know which program step is being carried out on the unit, even if you have been distracted.
- **Next step.** Staff can concentrate completely on the patient.
- **Operating hours performed and number of transfers.** It is easy to calculate efficiency.
- **Error messages.** No long error searches – the unit indicates if an operating error or technical failure has occurred.
- The **lightbeam barriers** monitor both sides of the table top.
- **Smooth transfer** is ensured by powerful gentle-starting motors. The patient is not exposed to stress.
- The entire table top is heated to a **comfortable temperature** of 32 °C.
- **Patented hidden belt edges** protect patients from injury, e.g. long hair cannot be caught.



- **Contact switches** and light barriers monitor the correct positioning of the hospital bed and the operating table at the transfer unit and automatically set the transfer heights. Additionally the exact height can be adjusted manually.

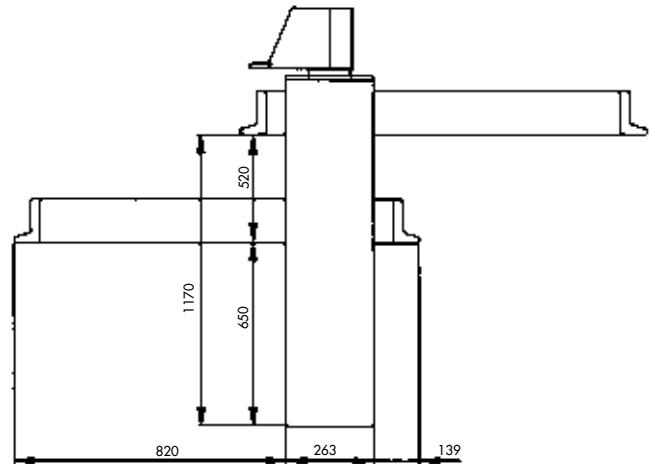
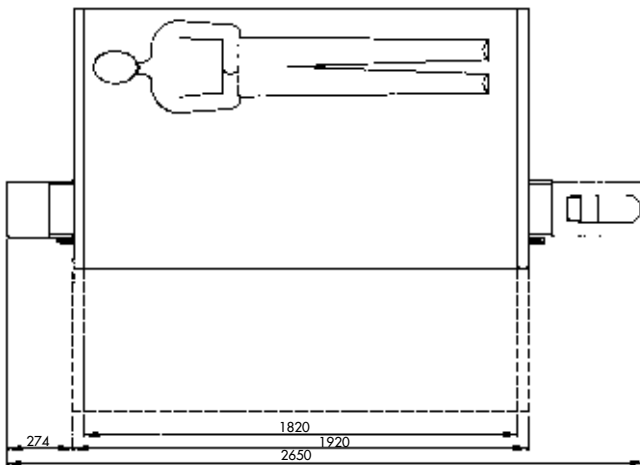


- Operation is carried out with a powerful **infra-red** remote control or directly at the control block. **Automatic function** operation is possible by using just **one button**.
- If required individual operating steps can be shortened or skipped.
- The transfer procedure can of course also be controlled manually.
- The buttons are **clearly arranged on the ergonomic hand-held infrared control unit**.



- Before and after use the infra-red remote control is stored safely in its holder and is charged by induction. The LCD display on the operating terminal **indicates low batteries in time**.

# ORBITER - The Technical Details



## Stationary Patient Transfer Unit ORBITER

Stationary unit for automatic (on request manual) transfer of patients from the operating table top to the hospital bed or other transport unit with an inside dimension of at least 1.797 mm.

Gentle-starting electric motor height adjustment for optimal adjustment to the differing bed and operating table heights, without strain on personnel. Lateral movement of patients by single-belt principle, driven by quiet gentle-starting electric motors.

The transport belt is made of a pleasant-textured, robust, disinfectant and cleaning agent resistant synthetic material and runs in covered lateral guides. The table top is heated to 32 °C, close to body temperature, and monitored by sensors.

The unit is controlled by a pivoted control block with an easy to read backlit LCD display, or by a powerful IR remote control. The display guides the user through the complete transfer procedure, indicates special situations, and warns of danger and incorrect operation.

The ergonomically shaped hand-held control unit is charged without contact in a special charging shell attached to the unit. The user is warned by LCD display in good time before the batteries are completely discharged.

Large-area contacts and opto-electronic sensors monitor and ensure safety regarding presence of bed and operating table, correct height above the various table tops, and the position of the patient. In case of danger they provide an acoustic warning.

The panelling of the unit is stainless steel (material 1.4301). Service access to the technical equipment is provided on the bed side.

If required the unit indicates the number of operating hours and the number of transfers. If servicing is required the detected errors and required measures are indicated.

The transfer section can be moved automatically to the highest position (zero position) to protect the unit and for easy cleaning.

CE conformity acc. to German medical product law (MPG), annex 7. Design class 1 acc. to MPG, annex 9.

### Functions:

Operating modes	Automatic, manual, cleaning
Speeds	Slow and fast
Belt movement	Accept/ lay down, shift
Lifting movements	Normal up and down, slow up and down
Directions	OT ' bed, bed ' OT
Duration of average transfer	approx. 120 sec.

### Dimensions:

Length	2640 mm
Width	1230 mm
Height	1620 mm

Weight	approx. 400 kg
Max. Patient weight	180 kg

### Fixing:

with 8 anchor rods		
Tensile load	5000 N	per anchor rod
Pressure load	6000 N	per anchor rod

If mounting frame is used		
Tensile load	1250 N	per screw
Pressure resistance		75 N/m <sup>2</sup>

### Article numbers:

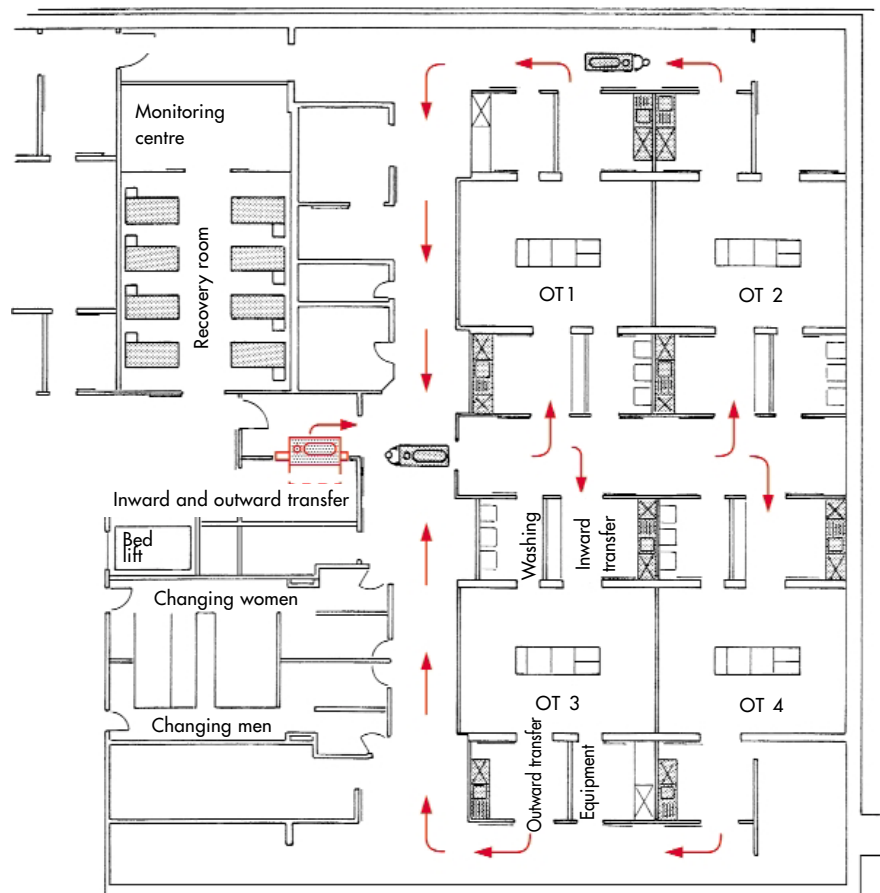
Stationary patient transfer unit	4 544 240
Knee bench	4 145 287
Mounting frame	on request

The stated dimensions may vary on account of the installation conditions.

## All-Round Service

TRUMPF Medizin Systeme provides support in all questions related to the patient transfer unit **ORBITER**.

- **Design** of the flow of transfer procedures.
- **Planning** concerning architecture and statical matters.
- **On-site consultation** with site visits and delivery of tailored parts which may be required.



TRUMPF Medizin Systeme specialists carry out:

- **Assembly** of the unit.
- **Training of the staff** regarding all functions of the new patient transfer unit **ORBITER**.
- **Maintenance.**
- **Service.**

# TRUMPF

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