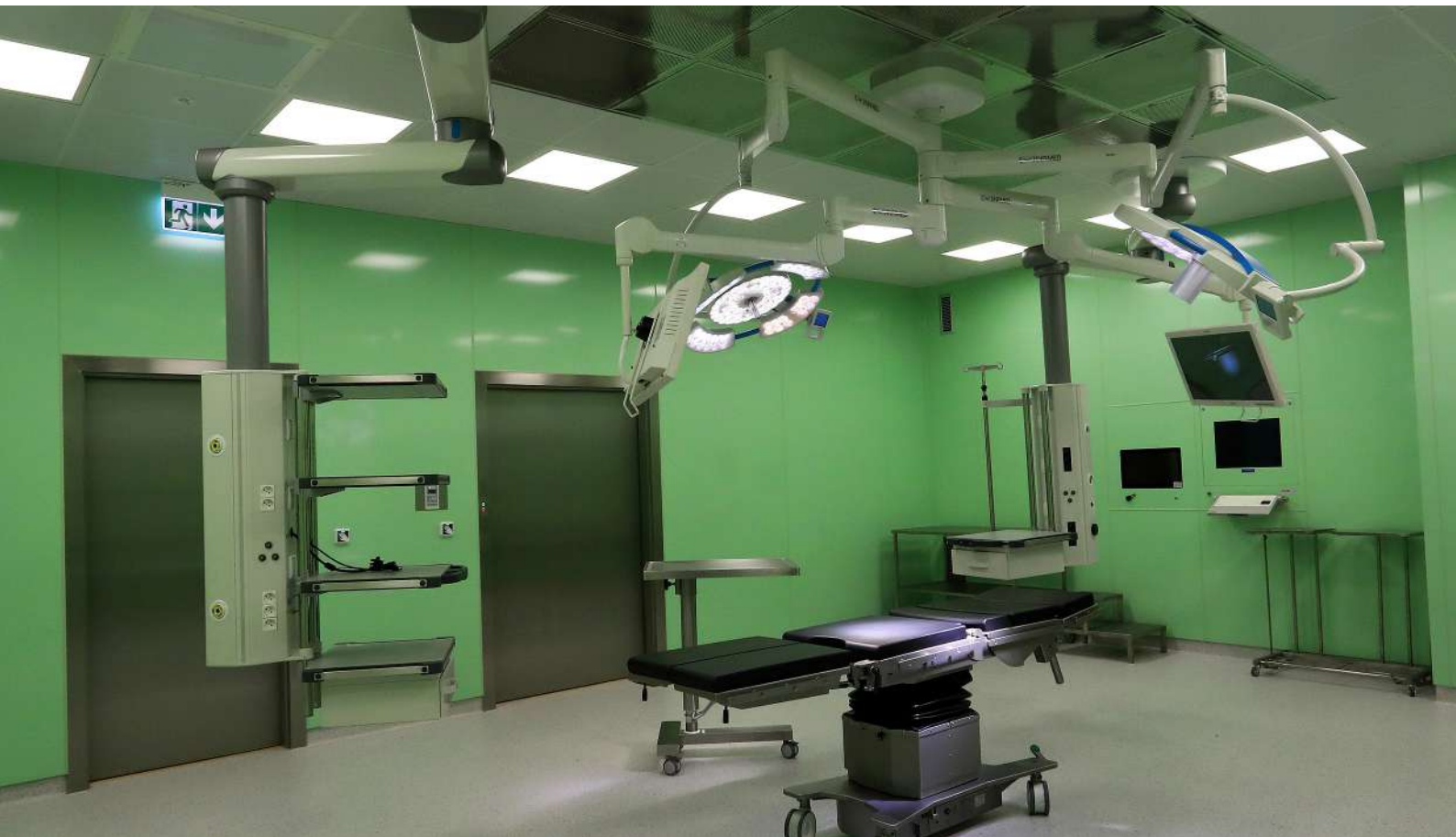




Modular Room System For Operating Theatres



We ensure complex realization of projects for modular operating theatres and other hospital rooms. Our offer includes measurements on the site, design, production, installation and service.

System

The flexible, prefabricated, modular system for operating theatres, preparation rooms, scrub areas and other hospital rooms. The design of the modular system is carried out in accordance with technical building requirements.

The advantages of the system are:

- Quick installation time
- Surfaces easy to clean and disinfect
- Effective prevention against bacteria
- Easy access to all devices behind the walls
- Easy dismantling for new construction, renovation or maintenance
- Mechanical durability and corrosion resistance
- Perfect integration with other equipment as surgical scrub sinks, cabinets, ventilation devices, X-ray viewers, etc.
- Modern and aesthetic look



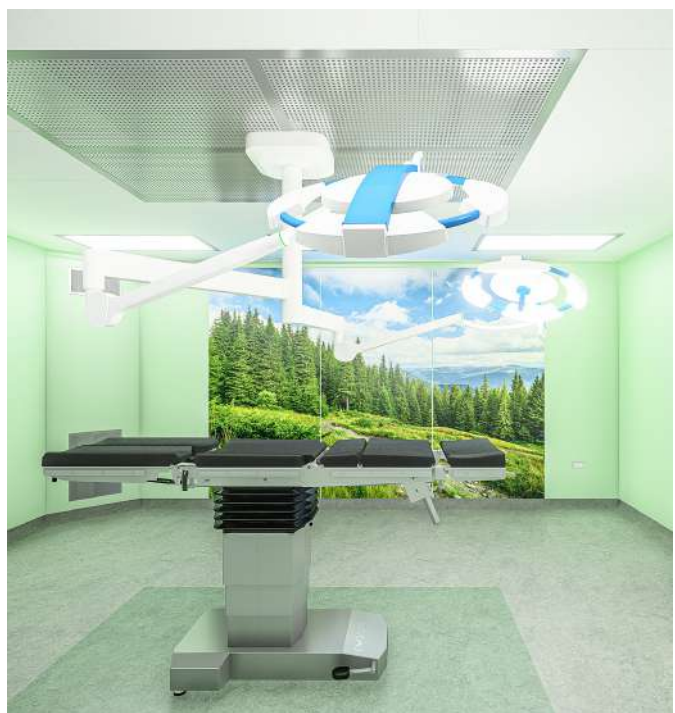
System



System Elements

We offer complex solutions for operating theatres including following elements:

- Wall panels system
- Ceiling panels system
- Laminar ceilings and exhaust grills
- Peripheral lights
- System doors
- Pass boxes
- Observation windows and pass-through windows
- Medical cabinets
- Surgical scrub sinks
- Flooring
- Control system OPERA
- X-ray viewers
- Electrical switches and gas sockets
- Cameras
- Monitors
- Clocks



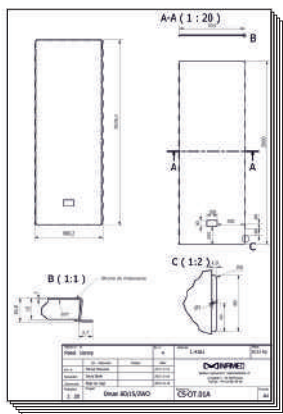
Phase 1

– measurements on the site



Phase 2

– layouts and visualisations



Phase 3

– preparation of material fabrication and production

Phase 4

– installation of the substructure on the site

Phase 5

– installation of the wall panels



Wall system (screwing system)



- ① Substructure
- ② Wall panel (epoxy coated steel)

- ③ Wall panel (glass with photo)
- ④ Control panel OPERA

Wall System

DESIGN

Installation of wall panels is based on the "C" and "U" profiles, width 50mm, 75 mm or 100mm, made of high quality galvanized steel 0,6-2mm. "U" profiles are mounted to the floor and ceiling using anchors. "C" profiles are mounted in vertical position, connected to "U" profiles, which creates the basis for the installation of the wall panels.

The wall panels are fixed by the screws with maximum joint width of 6 mm sealed by the special gasket.

All internal corner wall panels are curved and easy to clean.

The partition wall system design facilitates the dismantling of any individual panel, to provide easy access for later installations, alterations or repair work.

SURFACES

- Stainless steel (grade AISI 304 or 316), polished or powder coated with antibacterial paint
- Galvanized steel, powder coated with antibacterial paint
- Glass fixed on steel frame, available with decorative photos

TECHNICAL DATA

Heat resistance:

- double-layered wall panel: 1,75 m²*K/W
- single-layered wall panel: 1,60 m²*K/W

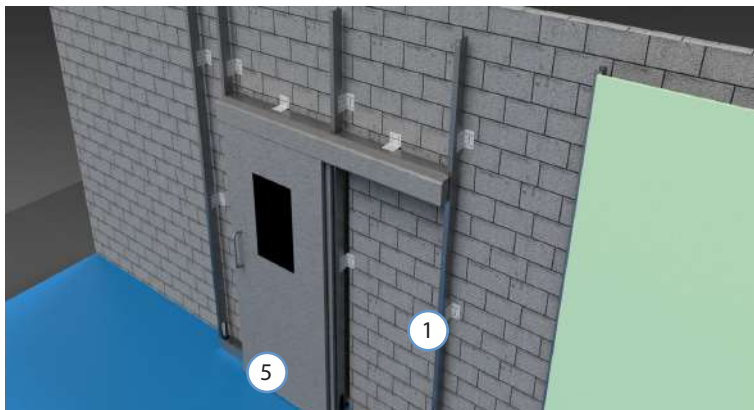
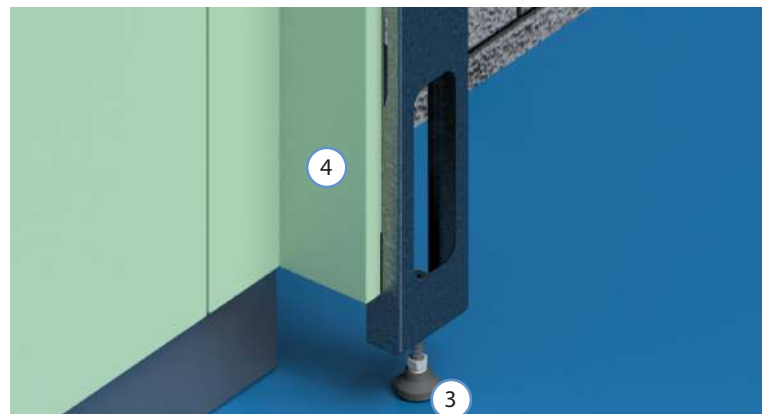
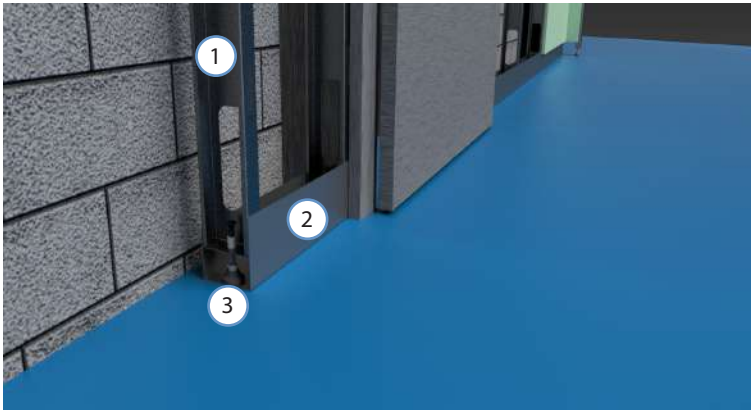
Sound insulation:

- double-layered wall panel: $R_w(C;Ctr) = 57 (-4, -12)$ dB

Air permeability:

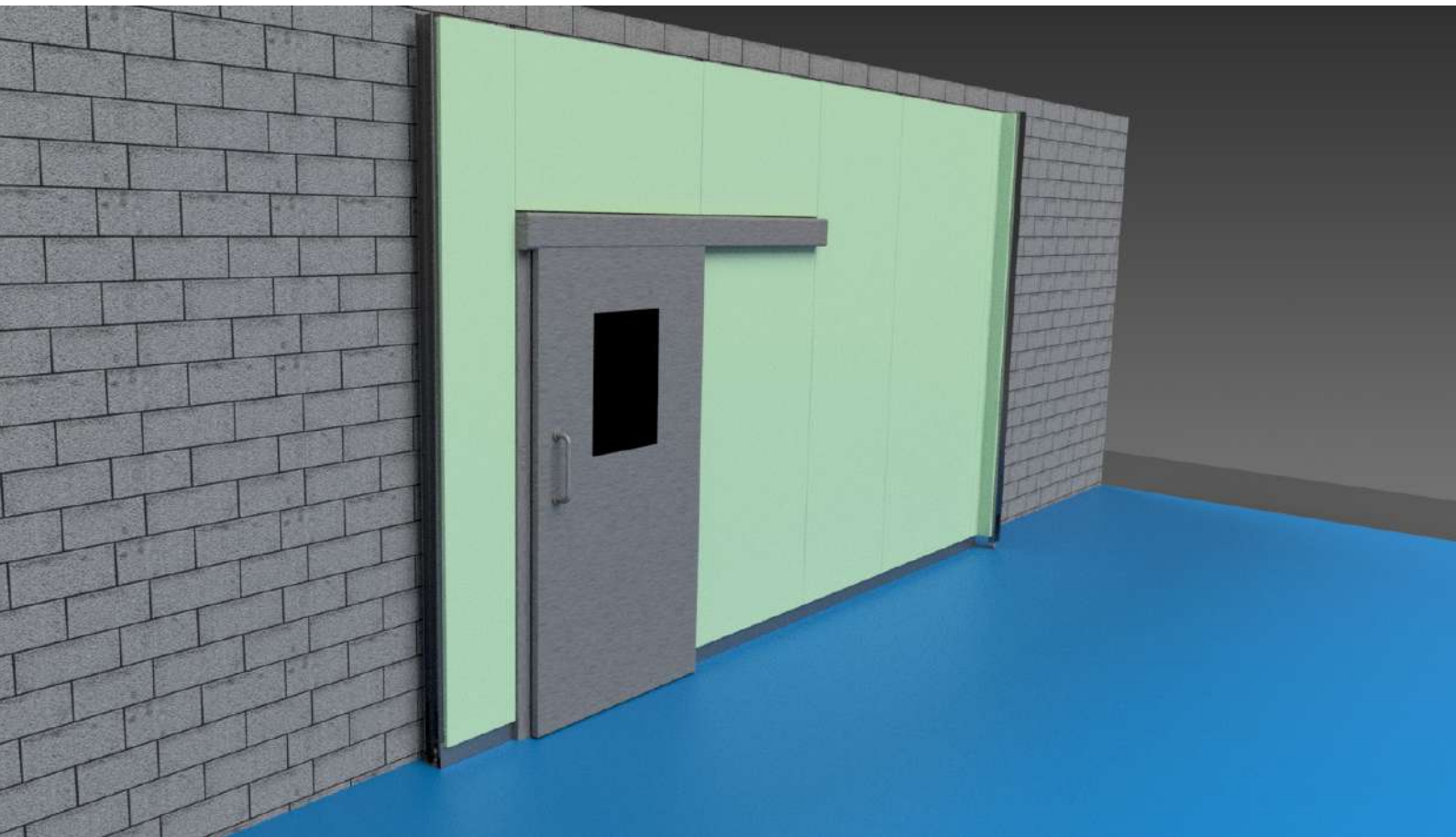
- 0,3 m³/hm² (hypertension and hypotension 500 Pa)

Installation details of the wall panels handing system



- ① "C" stud with openings
- ② "U" floor profile
- ③ Adjusting screw
- ④ Hanged wall panel
- ⑤ Door

Wall system (hanging system)



Wall System

DESIGN

Installation of wall panels is based on the "C" studs of width 75 mm or 100mm, made of high quality galvanized steel 1,5 mm. The studs are levelled using the adjusting screw.

The lower "U" profile, made of high quality galvanized steel 1,5 mm is base for plinth - curved connection of wall and floor, it is mounted to the floor with galvanized anchor. The upper "U" profile is closing the system.

The "C" studs have the special openings to hang the wall panels on the hooks, with maximum joint width of 3 mm sealed by the special gasket.

All internal corner wall panels are curved and easy to clean.

The partition wall system design facilitates the dismantling of any individual panel, to provide easy access for later installations, alterations or repair work.

SURFACES

- Stainless steel (grade AISI 304 or 316), polished or powder coated with antibacterial paint
- Galvanized steel, powder coated with antibacterial paint
- Glass fixed on steel frame, available with decorative photos

TECHNICAL DATA

Heat resistance:

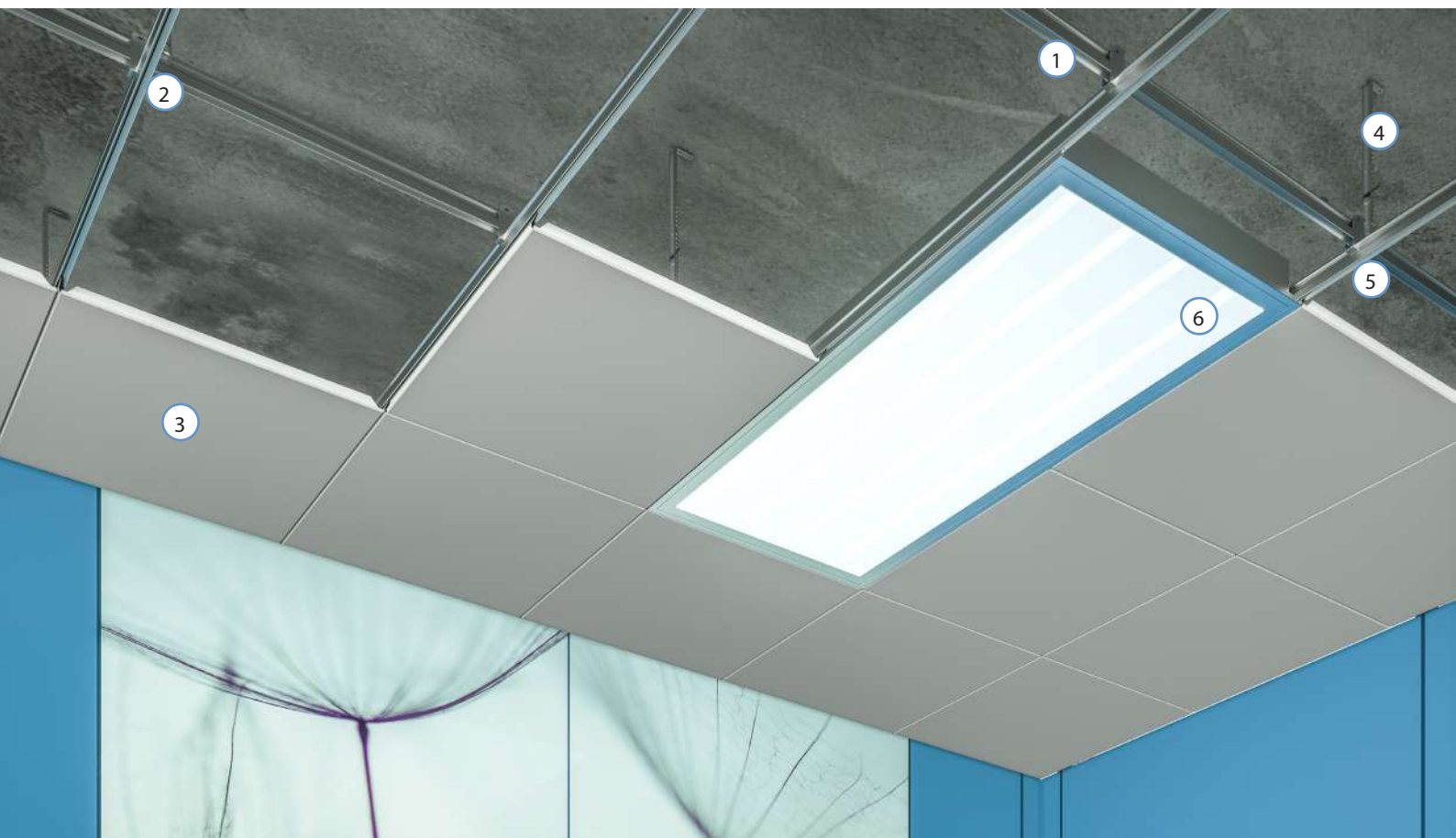
- double-layered wall panel: 1,75 m²*K/W
- single-layered wall panel: 1,60 m²*K/W

Sound insulation:

- double-layered wall panel: $R_w(C;Ctr) = 57 (-4, -12)$ dB

Air permeability:

- 0,3 m³/hm² (hypertension and hypotension 500 Pa)



- 1 Clamping profile
- 2 Cross connector

- 3 Ceiling panel
- 4 Nonius hanger-upper

- 5 Nonius hanger-lower
- 6 Peripheral light

Peripheral lights

Luminaires for cleanrooms with increased hygienic requirements:

LIGHT SOURCE

- LED light sources
- Fluorescent lamps

TECHNICAL DATA

- Quick and easy assembling, to be built-in CLIP IN type ceiling
- Integration with ceiling panels system
- High protection level against dust and water infiltration
- Available dimensions: 1200x600 mm, 1200x300 mm, 600x600 mm
- Luminary coffer made from steel sheet, powder coated in white
- Accessories: DALI dimming

Ceiling System

DESIGN

- Metal ceiling is made of individually detachable panels with standard dimensions 600 x 600 mm
- The substructure is made of galvanized steel
- Panels are fixed in clip-in system.

SURFACES

- Galvanized or stainless steel, powder coated, optionally with antibacterial paint.
- Standard colour is RAL 9010. Other color available optionally
- Matt, washable, light resistance surface
- Dust-free, abrasion-proof, corrosion resistant, non-hygroscopic.

Ceiling System Peripheral lights, Laminar Ceilings



Laminar Ceiling Air Diffusers

The laminar ceiling air diffusers also known as laminar ceilings are to be used for air conditioning of operating theatres and clean rooms. The devices are equipped with absolute H 13 filters with 99,95% filtration efficiency (optionally H 14 with 99,995% filtration efficiency), and provide balanced speed between 0.15 and 0.30 m/s linear (laminar) airflow within operating table area. This type of airflow complies with the highest hygienic requirements.

Individual sizes of air diffusers are made up with a set of modular, tightly connected, standard structure sections with precisely determined capacity ranges. The laminar ceiling air diffusers can be designed in many configurations with specific number of sections suitable for capacity ranges (free configuration of sections is possible according to arrangements with customer). Optionally the alarms of dirty filters can be singalized by OPERA control system.





Hermetically sealed doors

The hermetically sealed medical doors are made of stainless steel with brushed surface or epoxy coated.

The door leaves are filled with highly-compressed polyurethane foam, providing thermal and acoustic insulation at the same time, assuring light weight and rigidity of the leaf.

The doors are tailored to individual customer's requirements: the dimensions, different shapes and sizes of vision windows, door handles, door frames, optional use of automatics supplied by renowned manufacturers with different activation options.



Medical doors



Hinged hermetically sealed doors

SPECIFICATION

- The door leaf and angle door frame are made entirely from stainless steel with brushed surface.
- Angle type, inner side door frame
- Door fittings made of stainless steel.
- Door leaf thickness 40 mm.
- Door leaf acoustically and thermally insulated with highly compressed polyurethane foam, density 50 kg/m³, assuring light weight and rigidity of the leaf.
- Hygienic silicone gasket cushioning the closing of doors
- Drop down seal increasing air tightness and sound insulation
- Single or double-leaf doors.

OPTIONAL FEATURES

- Both side door frame
- Vision windows (round, rectangular, optionally with electric blinds)
- Vision windows with PRIVA-LITE® active glass which, under the effect of an electric current, switches from translucent to transparent
- Epoxy coating surface, with antibacterial protection
- Lead protection against X-ray radiation
- Self closers
- Door automation supplied by renowned manufacturers with different activation options (elbow, infrared, knee activation, service, full-open, half-open buttons)



Sliding hermetically sealed doors

SPECIFICATION

- The door leaf and angle door frame are made entirely from stainless steel with brushed surface.
- Angle type, inner side door frame
- Door fittings made of stainless steel.
- Door leaf thickness 40 mm.
- Door leaf acoustically and thermally insulated with highly compressed polyurethane foam, density 50 kg/m³, assuring light weight and rigidity of the leaf.
- Hygienic silicone gasket cushioning the closing of doors
- Drop down seal increasing air tightness and sound insulation
- Short or long door handles
- Single or double-leaf doors.

OPTIONAL FEATURES

- Both side door frame
- Vision windows (round, rectangular, optionally with electric blinds)
- Vision windows with PRIVA-LITE® active glass which, under the effect of an electric current, switches from translucent to transparent
- Epoxy coating surface, with antibacterial protection
- Lead protection against X-ray radiation
- Door automation supplied by renowned manufacturers with different activation options (elbow, infrared, knee activation, service, full-open, half-open buttons)

Medical doors

Pass-boxes, pass-through windows

Pass-boxes

SPECIFICATION

- Both side hinged doors, with interlocking feature (preventing opening of both at the same time).
- Electromagnetic or mechanic opening system.
- Hermetic closing.
- Vision window made of safe glass.
- Made of stainless steel, including handles. Optionally can be produced with lead protection.
- Dimensions according to individual customer needs.
- Flushed with wall panels.



Pass-box



Pass-through window

Pass-through windows

SPECIFICATION

- The window consists of two separate glass panes: fixed upper part and sliding lower part, moving on vertical tracks.
- The movement is facilitated by mechanism balancing weight for easy opening. The sliding part can be set in any position.
- Made of stainless steel. Optionally can be produced with lead glass.
- Dimensions according to individual customer needs.
- Flushed with wall panels.
- Optionally can also be fixed into the door leaf.

Built-in cabinets

SPECIFICATION

- Built-in cabinets are elements of wall cladding, flushing with wall panels create homogeneous surface.
- Available in any configurations: double, single, with glazed or full doors.
- Made of stainless steel, optionally epoxy coated.
- Dimensions according to individual customer needs.



Windows, glass elements

SPECIFICATION

- Made of stainless steel.
- Observation windows flushing with wall panels (fixed or openable), optionally with electrically operated blinds.
- Dimensions according to individual customer needs.
- Optionally can be produced with lead glass.
- Optionally with PRIVA-LITE® active glass which, under the effect of an electric current, switches from translucent to transparent



Built-in cabinets
Windows, glass elements
Medical Furniture

Medical furniture

Medical furniture for operating theaters, made of stainless steel. There is variety of furniture offered, among others:

- Instrument Mayo tables
- Dressing trolleys
- Medical trolleys
- Doctor stools
- Hangers with bowls
- Infusion holders
- Foot supports
- Working tables
- Medical cabinets
- Trolley for medical devices





Surgical Scrub Sinks

Surgical scrub sinks are made of stainless steel

SU-01 Surgical scrub sink with wall panel, without additional accessories. Available additional accessories: water, soap, brushes, towels dispensers.

Types and dimensions:

- SU-01.1, 1 bay, 850x600x1150 mm
- SU-01.2, 2 bays, 1500x600x1150 mm
- SU-01.3, 3 bays, 2100x600x1150 mm



SU-01.1



SU-03.2

SU-02 Surgical scrub sink with with knee operated water and soap dispensers.

Types and dimensions:

- SU-02.1, 1 bay, 845x635x1170 mm
- SU-02.2, 2 bays, 1600x635x1170 mm
- SU-02.3, 3 bays, 2355x635x1170 mm

SU-03 Surgical scrub sink with with infrared operated water and soap dispensers.

Types and dimensions:

- SU-03.1, 1 bay, 845x635x1270 mm
- SU-03.2, 2 bays, 1600x635x1270 mm
- SU-03.3, 3 bays, 2355x635x1270 mm



SU-02.3

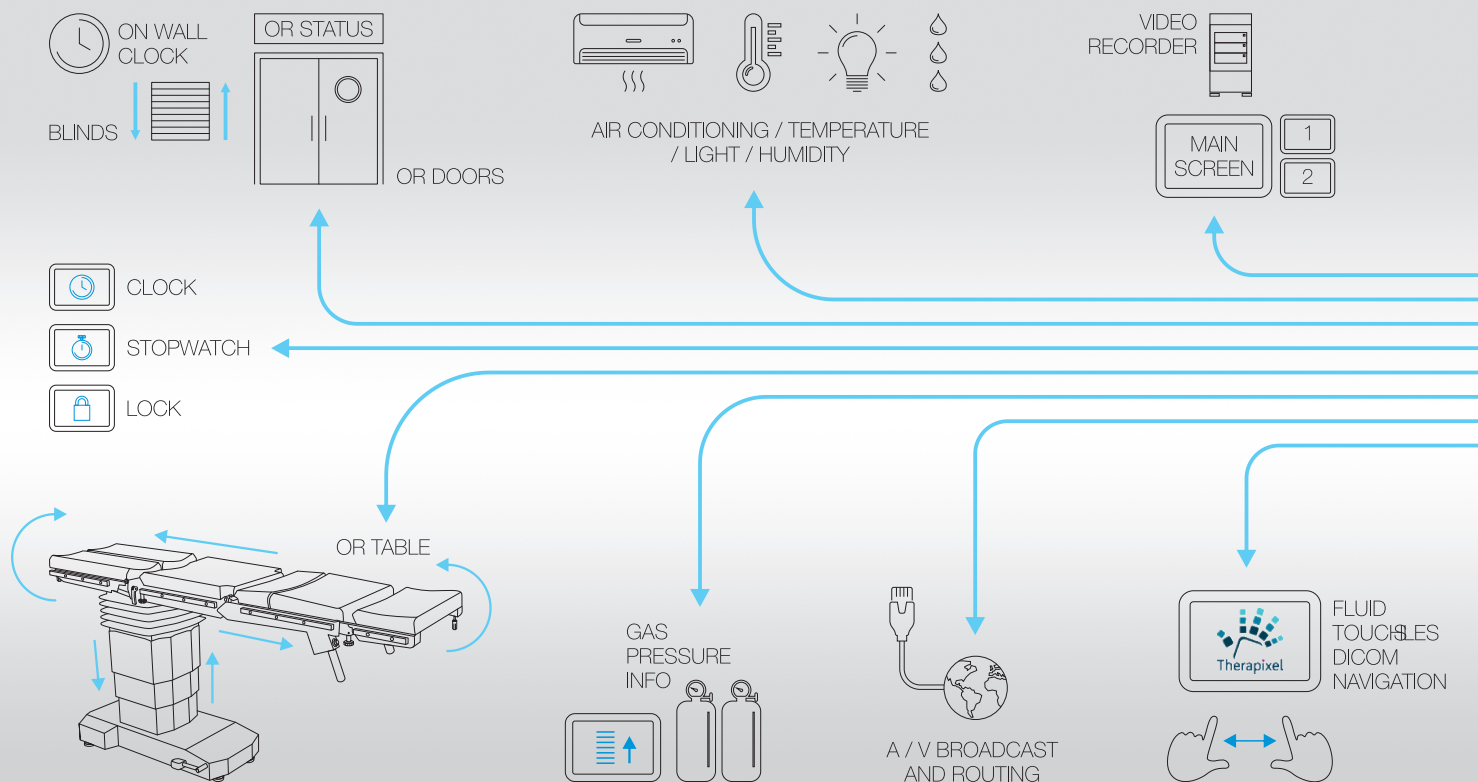
Surgical sinks



Additional accessories for surgical scrub sinks:

- Brush dispensers
- Disinfectant fluid or soap dispensers
- Paper towels dispensers
- Elbow operated water taps, wall mounted
- Infra-red water taps, mounted to the sink or wall mounted
- Infra-red water taps with infra-red fluid dispenser





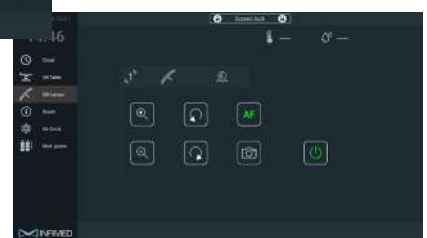
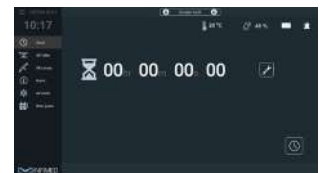
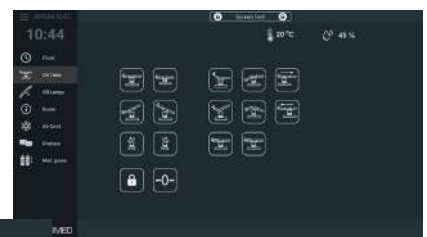
Opera control system

Provides better and easier control of the devices in the operating room from a single location. The system is very flexible, open, modular, can be adjusted to comply the client's expectations and requirements, accordingly to the above shown solutions. Can be operated from wall mounted control panel or wirelessly from mobile device.

The product is safe and secure and it is a certified Class I Medical Device manufactured in accordance with the ISO 9001, 13485 and other European standards. It provides a fully intuitive operation thanks to a simple and user-friendly interface, thereby minimizing the possibility of misuse and avoiding improper treatment operations.



OPERA Control System



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