

# clean-tek®

Customized. Cleanroom. Technology.



# Customized Cleanroom. Tech

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# Success concept

As a pioneer in cleanroom technology, clean-tek has played a key role in the development of modern cleanroom technology since 1986. Tradition, innovation and experience are the values that characterise the company to this day and are also the key to constant growth and success.

**Who we are.**

**What we do.**

**What we stand for.**

**Clean-tek is standard for represent customized cleanroom technology produced in our own factory.**

In addition to cleanroom ceiling, wall and door systems, clean-tek also offers weighing and sampling cabins, laminar flow modules, personnel and material airlocks as well as decontamination showers and many other components from our own production.

With a reliable feel for the demanding and complex applications for the needs from our customers, clean-tek develops innovative customized solutions in accordance with the high requirements of GMP, FDA and DIN EN ISO.

Further more to technically, regulatory and energy-optimised solutions, clean-tek is committed to offer sustainable solutions with an aesthetically pleasing design.

The products are mainly used in the particularly sensitive areas of pharmaceuticals, biotechnology and medical technology. They are also used in the food and cosmetics industry, microelectronics and mechanics, semiconductor technology and the automotive industry.

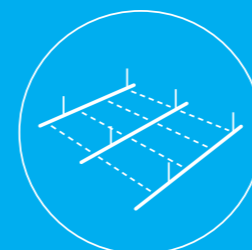
With locations in Renningen and Bensheim in Germany, Basel in Switzerland and Zrenjanin in Serbia, clean-tek is a leading national and international manufacturer of modern and high-performance cleanroom systems.

## Our services

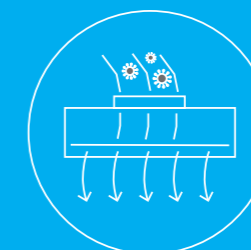
- Engineering, implementation and service of cleanroom systems
- Development of customized solutions
- In-house production of all essential cleanroom components
- Interface management during the entire project
- Consultancy and training
- On request, delivery of turnkey clean room systems as a general contractor company



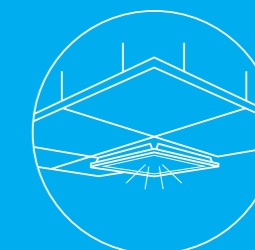
## Our Products



Cleanroom Ceilings



Filter Fan Unit (FFU)



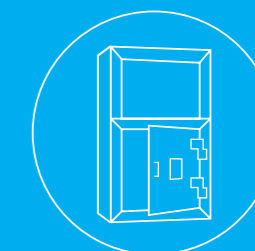
Lighting Systems



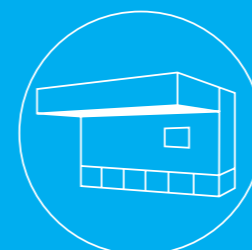
Cleanroom Walls



Cleanroom Doors



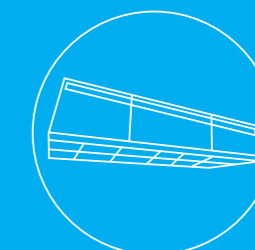
Material Hatches



Weighing Booth



Decontamination Shower



Laminar-Flow-Units

# Cleanroom Ceilings




As a system supplier, clean-tek has different, self-developed cleanroom ceiling systems, which are all characterised by their flexibility and maximum modularity.

Thanks to in-house production and components that have been tried and tested over many years, clean-tek can offer an optimum cleanroom solution for almost any application.

So the ceiling systems in particular are a key success factor the construction of cleanrooms. Clean-tek has invested decades of development work into the optimisation of various cleanroom ceiling systems.

All clean-tek cleanroom ceilings are compatible with third-party components (walls, filter modules, lights, etc.) on request.



	ceil-tek Band grid ceiling	T-Grid Cross band grid ceiling	clean-ceil Clamping cassette ceiling
			
Description	<ul style="list-style-type: none"> <li>• Cabling is carried out within the band grid</li> <li>• Individual functional elements can be added or replaced at any time</li> <li>• Compatible with all standard installation parts</li> <li>• The ceil-tek is not accessible as standard</li> <li>• It can be made fully or partially accessible as an option</li> <li>• Complies with the requirements of the EC GMP guidelines and DIN EN ISO 14644</li> </ul>	<ul style="list-style-type: none"> <li>• Highly flexible ceiling system</li> <li>• All grid dimensions possible</li> <li>• With appropriate suspension also as partially or fully accessible</li> <li>• The system fulfils the requirements of the EC GMP guidelines and DIN EN ISO 14644</li> <li>• All elements can be exchanged independently of neighbouring panels</li> <li>• Compatible with all standard installation parts</li> </ul>	<ul style="list-style-type: none"> <li>• Efficient solution for singleskin, non-accessible and absolutely flush cleanroom ceilings.</li> <li>• Die standardisierten Rastermaße gewährleisten Lösungen nach Maß</li> <li>• The room layout and the structure of the partition walls can be realised independently of the grid ceiling.</li> <li>• Can be converted and extended at any time</li> </ul>
Corresponding standards	GMP   FDA   DIN EN ISO	GMP   FDA   DIN EN ISO	GMP   FDA   DIN EN ISO
Suitable up to cleanliness class	All purity classes	All purity classes	All purity classes
Walkability	Optionally fully, partially or not walkable (walkability up to max. 150 kg/m <sup>2</sup> traffic load)	Optionally fully, partially or not walkable (walkability up to max. 150 kg/m <sup>2</sup> traffic load)	Not walkable
Suspension grid (standard sizes)	1200 x 2400 mm	1200 x 1200 mm Special sizes available on request	1200 x 2400 mm
Inspection opening	On the cleanroom side	On the cleanroom side	On the cleanroom side
Compressive strength	± 200 Pa	± 200 Pa	0–200 Pa
Replacement of individual elements	Yes	Yes	Yes
Concealed cabling	Yes, in band grid	No	No
10-year subsequent delivery guarantee for standard installation parts	Yes	Yes	Yes
Resistant to disinfectants	Yes	Yes	Yes
Possible installation parts and options	Lighting, Fan-filter-units, Filter modules, Air recirculation modules, Air diffusers, LF fields, Return air ducts, Sound insulation, Fire detection systems, Fall protection, and much more	Lighting, Fan-filter-units, Filter modules, Air recirculation modules, Air diffusers, LF fields, Return air ducts, Sound insulation, Fire detection systems, Fall protection, and much more	Lighting, Fan-filter-units, Filter modules, Air recirculation modules, Air diffusers, LF fields, Return air ducts, Sound insulation, Fire detection systems, Fall protection, and much more

# Clanroom wall systems




As a system supplier, clean-tek has various cleanroom wall systems developed in-house, which all are characterised by their compatibility with each other and maximum flexibility.

So we offer you a modular system with which we develop optimum cleanroom solutions an not simply manufacture wall panels.

**Customized special solutions are part of our standard.**

Thanks to our in-house production and the flexibility of our system components we can guarantee almost limitless variability.



	<b>GMP 50 / 100</b> Wall system as sandwich construction	<b>Bi-Wall</b> Wall system in shell construction	<b>Full glass wall</b> in GMP design
			
Description	<ul style="list-style-type: none"> <li>Cleanroom wall in sandwich construction</li> <li>Available with a width of 50 mm or 100 mm</li> <li>Proven wall system in GMP areas</li> </ul>	<ul style="list-style-type: none"> <li>Wall system in shell construction</li> <li>Preferred used as a partition wall with high flush-mounted installation density</li> </ul>	<ul style="list-style-type: none"> <li>Full glass wall in GMP design</li> <li>Create a bright and pleasant working atmosphere. Maximum design freedom in the project by combining with other clean-tek cleanroom walls</li> </ul>
Wall thickness	50 mm for GMP 50 wall 100 mm for GMP 100 wall	100 mm	Glass strength 10–15 mm
Wall cut-outs possible	Yes	Yes	No
Wall infill	Aluminium honeycomb or Rock wool	No	No
Wall panel material	Sheet steel, galvanised, 1.00 mm Stainless steel 1.4301 (V2A), 1.00 mm Stainless steel 1.4401 (V4A), 1.00 mm Aluminium, 1.50 mm	Sheet steel, galvanised, 0.80 mm Stainless steel 1.4301 (V2A), 1.00 mm Aluminium, 1.50 mm	Mounting frame Aluminium, powder-coated RAL 9010 or anodised (EV1) Glass pane ESG (toughened safety glass)
Suitable up to cleanliness class	All purity classes	All purity classes	All purity classes
Replacement of individual elements	Yes	Yes	Yes
Concealed cabling	Yes	Yes	No
Resistant to disinfectants	Yes	Yes	Yes
Sealing	Cleanroom silicone Alternative: Hybrid sealant	Cleanroom silicone Alternative: Hybrid sealant	Cleanroom silicone Alternative: Hybrid sealant
Possible wall installations and options	<ul style="list-style-type: none"> <li>Parapet glazing</li> <li>Overdoor elements</li> <li>Wall cut-outs for, for example material hatches</li> </ul>	<ul style="list-style-type: none"> <li>Parapet glazing</li> <li>Overdoor elements</li> <li>Wall cut-outs for, for example material hatches</li> </ul>	<ul style="list-style-type: none"> <li>The all-glass wall can be easily combined with all other clean-tek wall systems</li> </ul>

# Floor connection options

The special clean-tek connection profiles can compensate for floor unevenness of +/-20 mm.

The ceiling connection is visually identical to all wall systems. This allows all clean-tek wall systems to be compatible with each other.

**There are basically four different floor connection profiles**

## GMP-Standard

The cleanroom floor can be installed over the entire surface. The connection profile is installed on the finished floor. Suitable for all cleanline classes according to EC GMP guidelines, DIN EN ISO 14644-1, FDA and VDI 2083. The thumb cavity is provided by means of a silicone fugue.

## Epoxy cove

Suitable for epoxy or pharmaceutical terrazzo fillets. One-sided or double-sided coving can be realised.

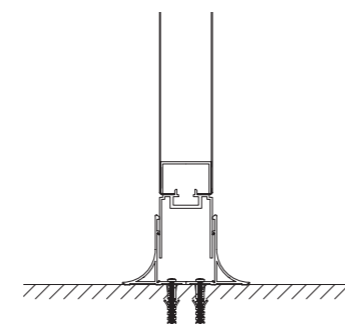
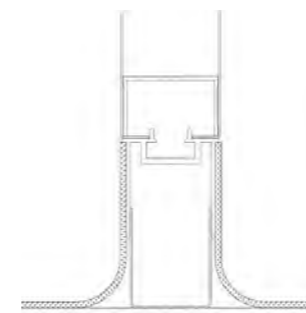
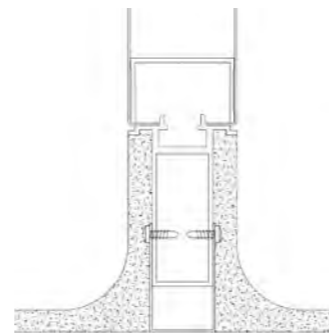
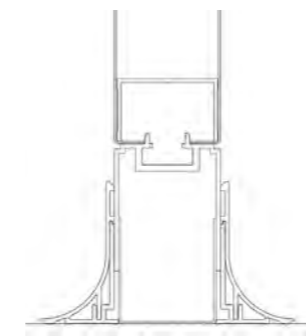
## PVC coving

Suitable for PVC floors. Fillet radius is defined by floor layer.

## Hollow aluminium profiles

If the GMP standard is not sufficient, aluminium profiles can be retrofitted for coving with a larger radius.

**Cove profiles are available for:**  
Wall-floor, Wall-wall and Ceiling-wall



# Wall installations

## Parapet glazing

The parapet glazing is a flush integration of a glazing into the band grid wall system. It consists of two laminated safety glass panes with 6 mm glass thickness. The width is coupled to the maximum axis dimension of the band grid wall, which is usually 1.200 mm wide.

Glass type	VSG
Glass thickness	6 mm per pane
Number of panes	2 pieces
Width of glazing	Freely selectable up to max. 1.250 mm
Height of glazing	Freely selectable
Parapet height (lower edge of glazing)	Freely selectable



## Upper door element

This is a wall element above a door. If there is sufficient space, a sill glazing can also be used as a skylight.



## Cut-outs

Cut-outs are necessary if, for example, machines, conveyor belts or material hatches has to be integrated into the wall system. Rectangular cut-outs can be made in each functional element ex works. An aluminium reveal is used so that the wall filling does not separate any particles at the cut-out. The exact position and size of the cut-out is defined during the planning. For cut-outs in element width, an upper and a lower wall element are connected with a profile system. Due to the flexible width, fixtures can be integrated directly flush installation into the wall system.



# Wall protection systems

clean-tek offers scratch protection for entire walls impact protection systems on the floor. This effectively protects the walls from scratches and other damages.

Optimum protection is provided by the combination of two parts, each with a substructure, which is attached to the wall or floor and a 2 mm thick GMP-compliant stainless steel cover.

This absorbs impact loads in the stainless steel cover and converts them into deformation energy in the substructure if necessary

The wall protection can be attached to any wall system (metal, drywall or solid wall).

The modular design allows the elements to be replaced quickly and easily, for example in the case of conversions.

Due to the arrangement of the impact protection on the floor, mechanical cleaning of the floors is also possible without any problems.



# Cleanroom doors

## Hinged doors

- Version as 1 or 2-leaf door
- GMP-compliant design
- Can be integrated into clean-tek wall systems on both sides
- Full or partial glazing possible
- Resistant to disinfectants



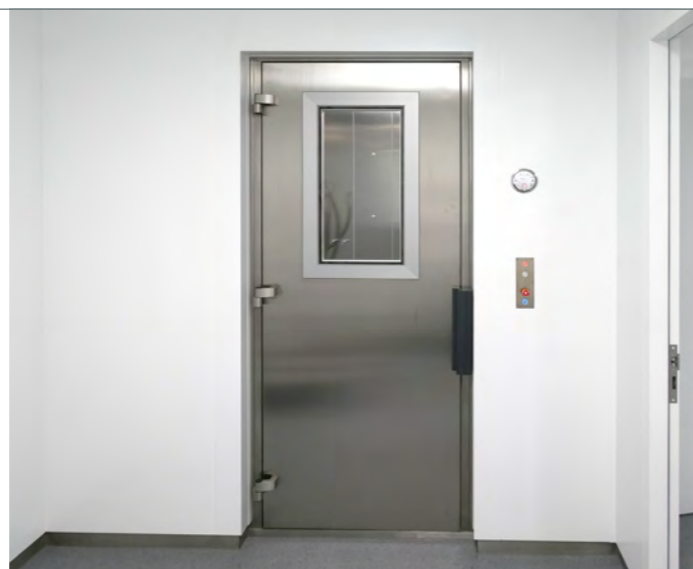
## Sliding doors

- Designed as a 1 or 2-leaf sliding door
- Especially suitable for narrow rooms or corridors
- GMP-compliant design
- Full or partial glazing possible
- Can be controlled manually or automatically
- Disinfectant-resistant



## Gas-tight doors

- For safety laboratories or rooms with increased security requirements
- Designed as 1-leaf stainless steel door
- Pneumatic door lock
- Inflatable door seal



## Features and advantages of clean-tek cleanroom doors

- Fulfills high tightness requirements
- Suitable for GMP areas
- Installation on both sides with a 50 mm thick clean-tek wall system
- Installation on one side with a 100 mm thick clean-tek wall system
- Easy to clean and disinfect
- The door leaves can optionally be opened and closed using an automatic door drive
- Sliding door leaves are monitored by a safety device

## Material information

### Surface:

sheet steel, galvanised, 1.00 mm

### Optional:

Stainless steel 1.4301 (V2A), 1.00 mm

Stainless steel 1.4401 (V4A), 1.00 mm

Anodised aluminium, 1.50 mm

### Frame:

Aluminium or Galvanised sheet steel

Alternatively, blanketed hollow chamber profile for doors made of V2A

### Door installation parts:

Anodised aluminium in EV1 (stainless steel look)

## Special versions and options

- Customized dimensions
- Integration of door glazing
- Safety sensor to prevent unwanted closing of automatic sliding doors
- Design as an interlock door with traffic light display
- Interface communication for air conditioning technology
- Optionally with drop-down seal, top door closer and reed contact
- Optionally with panic lock, also available with cover rose for locking cylinder
- Panic bar or door knob as an alternative to the door handle
- Escape route door opener (pneumatic door opener) Automatic drive





# Weighinh booth

For the protection of persons an products when weighing active and auxiliary substances

The weighing cabin consists of a clean-tek wall system as a return air shaft with an integrated operating terminal for controlling and monitoring the laminar air flow.

The return air shaft contains filters that can be replaced via the return air inlets.

Various systems can be installed and combined with each other to partition off the work area at the front and end. Strip curtains, wall systems or all-glass walls are possible.

DEHS ports for aerosol feed and raw gas concentration measurement are integrated for function monitoring. The filters are monitored via differential pressure manometers for main and final filters.

If required, dry coolers can be integrated to dissipate heat loads.

Various media can be integrated into the wall system, such as sockets and network connections.

## Features and benefits:

- Product and personal protection
- Complies with FDA, GMP, DIN EN ISO and WHO requirements
- Offers highest purity requirements  
Long-established product, constantly optimised
- Achieves class A according to GMP guidelines
- Flexible workplace design
- Future-proof investment thanks to a 10-year subsequent delivery guarantee for all conversion and supplementary components
- Easy to clean and resistant to disinfectants
- Generates a vacuum in the weighing area integrated lighting
- Individual design according to customer specification

## Options:

- Boundary made of glass walls
- EX-protection design
- Installation of data and power sockets
- Extraction arms
- Low-contamination filter change
- Air cooler

## Air flow

The vertical supply air is fed in over the entire air area of the cabin ceiling. Fan modules push the air through HEPA filters into the cradle area. CG distributors (laminarisators) are installed to prevent draughts and achieve optimum air distribution. These consist of very fine-meshed polyester or stainless steel mesh. The lighting system above the CG distributor ensures sufficient and glare-free work lighting.

A slight negative pressure can be generated within the weighing area by using front and end demarcation systems, which prevents external contamination.



# Decontamination shower

Wet and mist shower to protect persons and the environment

The decontamination shower is planned and manufactured individually for each application. Using individual modular components a suitable shower can be designed for every requirement.

After testing and acceptance (FAT), the decontamination shower is integrated into the existing cleanroom system on the customer's, ready for use.

## Control and function:

The cleaning functions and processes can be designed in different ways.

## The programme sequence can include:

- Personal cleaning
- Foot sole cleaning
- Cabin cleaning
- Detergent admixture
- Residual water drainage of the pipes

## Features and benefits:

- Reliably protects staff and the environment of contamination from risk areas.
- Proven clean-tek system.  
The decontamination shower consists of a variety of proven clean-tek products which are optimally matched to each other.
- No interface problems.  
As a system supplier we offer the containment in addition to the decontamination shower.
- This avoids colour discrepancies between the containment and the decontamination shower.
- Any type of floor connection can be implemented.  
Whether epoxy, pharmaceutical terrazzo, tile coving or PVC flooring in the surrounding cleanroom: any connection can be handled. All parameters are freely adjustable. (Flushing times, locking times, etc.)
- Individual design.  
We always adapt our decontamination shower specifically to your requirements.

## Options

- Foot sole cleaning
- Bag-out port
- Breathing air port
- Monitoring device
- Airlock integration
- Three doors

## Functional principle

The programme sequence is precisely defined in a functional description according to the application specific requirements. This has a significant influence on the control system and all assemblies.

Basically, the foreground focus is on personnel decontamination.

But also cabin cleaning, cabin cleaning, foot sole cleaning, emergency shower function, hand shower etc. may also be useful or even necessary for the process. The cleaning cycle or the entire process is set.

If the decontamination shower is integrated into an airlock area, the door interlocks are combined into a functioning airlock control concept.



# Laminar flow modules

The clean-tek laminar flow modules enable simple and economical retrofitting of LF fields within a cleanroom system. Thanks to the flexibility of the modules, the layout of the protection zone can be changed at any time.

In addition, the module offers numerous installation and mounting options independent of the existing ceiling system.

The LFM's generate a low-turbulence displacement flow (laminar flow), which reliably prevents contamination of products by airborne particles.

They are frequently used above sterile filling lines in the pharmaceutical industry.

## Features and benefits:

- Generate a low-turbulence displacement flow (laminar flow)
- Modular design enables simple but effective generation of subsequent protection zones in the cleanroom
- Provides optimum product protection against airborne particles
- Flush installation in the cleanroom ceiling possible
- Can be installed directly below the cleanroom ceiling
- Surface-mounted solutions possible
- Works independently of the cleanroom ventilation system
- Easy maintenance thanks to inspection openings
- GMP-compliant design
- Proven product for filling and packaging lines
- Easy to clean and resistant to disinfectants
- Extensive control and monitoring functions
- Energy-optimised fans
- Integrated connection nozzles for aerosol feed and raw gas measurement



## Installation parts and options

- Air outlet optionally via perforated plate or CG distributor
- Lateral boundary made of antistatic louvre curtains, PVC cleanroom curtains, safety glass curtains, safety glass or a partition wall system
- The module offers numerous options for customized special solutions
- Upright version possible
- Optionally with integrated lighting
- Optionally with air cooler
- Optionally with pre-filter
- Optional installation of probes for monitoring
- Generation of large-area LF areas by stringing together several LFM modules

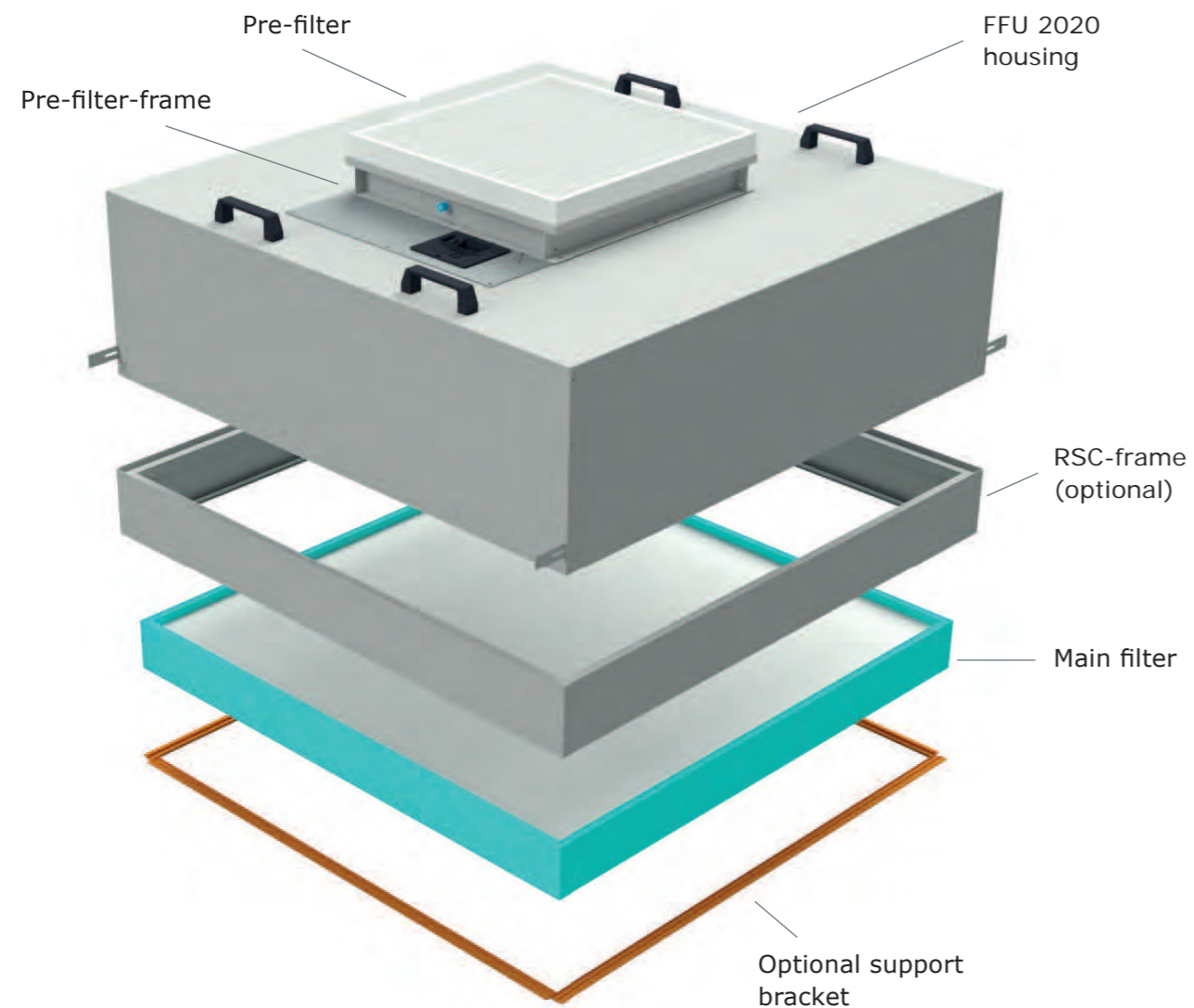
# Filter-Fan-Unit

## Filter fan unit for clean air generation

As the filter and air purification modules in particular are a key success factor in the construction of cleanrooms, clean-tek has invested decades of development work in its own Filter fan units (FFUs).

The FFUs generate a high supply air quality and these reduce the particle concentrations in cleanrooms or individual protection zones within a cleanroom system.

In the upper intake area, the air is optionally cooled by a mounted cooler and optionally also pre-cleaned by a pre-filter. The intake air is then finely cleaned by a HEPA filter and introduced into the cleanroom as a low-turbulence displacement flow.



## Features and benefits:

- Generates low-turbulence displacementflow or turbulent mixed ventilation
- Standard sizes and special dimensions enables integration into almost all common cleanroom ceiling systems
- Filter change and maintenance of the fan possible from the cleanroom side and from above
- Energetically optimised fans
- Sound-optimised design
- Integrated measuring devices
- High mechanical stability

## Installation parts and options

- Integration of an air cooler
- Integration of a pre-filter
- Air speed control, e.g. via a sensor
- Air outlet optionally via swirl diffusers, perforated plates or CG distributors
- Filter differential pressure measurement
- Generation of LF areas through thestringing together several FFUs with CG distributors and corresponding partitions (PVC curtains or wall systems).
- Special sizes possible  
Min. 520 mm  
Max. 1400 mm



# Material hatches

## Active material hatches

- Has its own fan
- Operates independently of the cleanroom ventilation system
- Integrated HEPA filter
- Low-turbulence displacement flow in the interior of the hatch
- Frees the products from airborne particles during the rinsing time



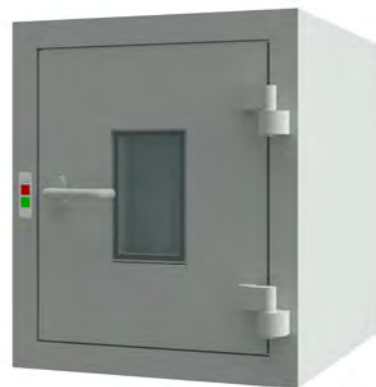
## Partially active material hatches

- Equipped with supply and exhaust air spigots for connection to the on-site ventilation system
- Integrated HEPA filter
- Delivery includes integrated HEPA filter



## Passive material hatches

- No ventilation
- Particle ingress is limited by the function of the mutually electrically interlocked doors
- Designed for quick installation in cleanroom and partition walls, plasterboard or brickwork
- The hatch is easy to clean and resistant to disinfectants



Our material hatches are used for the controlled entry and exit of products and material between rooms with different cleanliness classes.

Contamination by airborne or adhering particles is reduced to a minimum.

All clean-tek material hatches are equipped with an electrical interlock. In addition to our standard dimensions we also manufacture airlocks to fit your specific application.

## Special designs and options

- Housing made of V2A stainless steel (1.4301)
- Individual dimensions
- Transport trolley (for active and partially active versions)
- Free choice of door hinges (left-right / left-left / right-right)
- Door arrangement across the corner
- Delivery of a panelling frame
- Underframe to increase the load-bearing weight
- Special constructions possible on request



# Cleanroom luminaires

## Band grid luminaire BRL

For installation in the ceil-tek ceiling system

The LED recessed luminaire is designed for flush mounting in the ceil-tek ceiling system from clean-tek and is especially suitable for clean rooms with increased hygienic requirements.

The luminaire corresponds the safety standard of the IP 65 specifications for usage in damp rooms.



## T-grid luminaire TGL

For installation in the T-grid ceiling systems

The LED recessed luminaire is designed for flush mounting in the T-Grid ceiling system from the company and is especially suitable for clean rooms with increased hygienic requirements.

The luminaire corresponds the safety standard of the IP 65 specifications for usage in damp rooms.



## Recessed luminaire EBL

For installation in the clean-ceil ceiling system

The LED recessed luminaire is designed for flush mounting in the clean-ceil ceiling system from clean-tek and is especially suitable for clean rooms with increased hygienic requirements.

The luminaire corresponds the safety standard of the IP 65 specifications for usage in damp rooms.



All clean-tek luminaires meet the special cleanroom requirements for illuminance, luminaire sealing and cleanability.

Equipped with professional LED technology and designed as recessed luminaires, they are compatible with all clean-tek ceiling systems and meet the highest hygienic design principles.

The clean-tek luminaires can also be integrated into other ceilings.

## Options

- Dimmable lighting through use of a DALI bus system
- Switching unit for external emergency power
- Change of light colour
- Yellow light

**In accordance with DIN EN 62471 „Photobiological safety of lamps and lamp systems“, this luminaire was classified in the „free group“.**

**This means for you, the user:**

**No risk!**

There is no risk of damage to the eye, even if you look permanently in the direction of the light direction of the light source (unlimited exposure duration).



# Airlock control system GCU

(Gate Control Unit)

With our gate control units, up to 12 doors and interlocks can be controlled and monitored together.

The individual door groups are controlled jointly via special master module. Additional slave extensions can be connected to each master module, every single one can be used to integrate three more doors into the control system.

This means that additional doors can also be connected to the control system at a later date. Thanks to our many years of experience with various interlock control concepts, we have been able to combine the advantages of different control concepts in our new gate control units. This gives you a high degree of flexibility, even for extensive room projects.

Modern control concepts for cleanroom and airlock doors reliably prevent cross-contamination from different room areas and are therefore an indispensable component for an error-free cleanroom system.

## Features and benefits

- Complies with the recognised rules of technology, including the EltVtR and the EN 60954 category 3
- Simple installation through configuration ex works
- Can also be used on escape and fire doors
- Visual status display via classic traffic light (green/red)
- Integrated emergency open button
- Access rules and restrictions can be individually defined
- High investment security thanks to simple expansion modules
- The GCU works even with complex door and interlock concepts

## Configuration and commissioning

The gate control unit and the emergency stop module are installed in a control cabinet, which can also be installed anywhere outside the cleanroom. From there, the cables are laid for each interlock door.

The gate control unit is configured and labelled at the factory in accordance with the agreed conditions. An initial function test is also carried out at the factory. Installation is carried out on site using a simple colour-coded, mix-up-proof connector system. Commissioning is carried out and recorded by the installer using a test device.

## Options

- Connection to your fire alarm centre
- Consideration of flushing times
- Explosion-proof version available on request
- Discretion switching

## Scope of delivery

- Switch cabinet with 24V power supply
- Cable from the interlock control unit to the interlock function
- Configuration ex works
- Commissioning on site using test device
- Test report and documentation
- Provision of the configuration software





## Execution GCU master modules

clean-tek offers two GCU master modules with the respective slave extensions.

**This allows you to react flexibly to changes in the room and to changes in access rules.**

### Gate control unit GCU-Master 3

For interlocking up to three doors in an interlock matrix. The configuration is carried out ex works.

The gate control allows:

- Setting the type of interlock, active or passive, for each interlock function
- Setting the recovery times
- Querying the door status (e.g. for BMS)
- Alarm signalling contact (configurable)
- Configuration of an additional contact (e.g. discretion circuit)
- Prioritisation of the various contacts
- Colour configuration of the traffic light display (RGB)

The interlock control unit is connected to a terminal box, to which peripheral devices can be connected separately.

Suitable for installation in a switch cabinet with standard mounting rails.

Electrical connection: 24 V DC or 230 V AC via power supply unit to earthed socket (DE). Supply line and connection on the site.

### Interlock control unit GCU Slave +3

Extension module for Gate control GCU Master. Allows the locking of three additional doors within an interlock.

### Interlock function GCU, swing doors

The interlock function for swing doors in escape and rescue routes.

### Interlock function GCU, high-speed door/ Sliding door

Interlock function for high-speed door

### Interlock control, Emergency stop module Master 6

Emergency stop module for gate control unit

This module is required to switch off the interlock function reliably and safely.

The emergency stop module can be used for safely switch off up to 6 interlock doors. The number can be increased with an extension module.

### Airlock control, Emergency stop module slave +6

Emergency stop module slave +6

Extension module for the „emergency stop master“ With this extension module, a further 6 doors can be switched off via emergency stop.



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