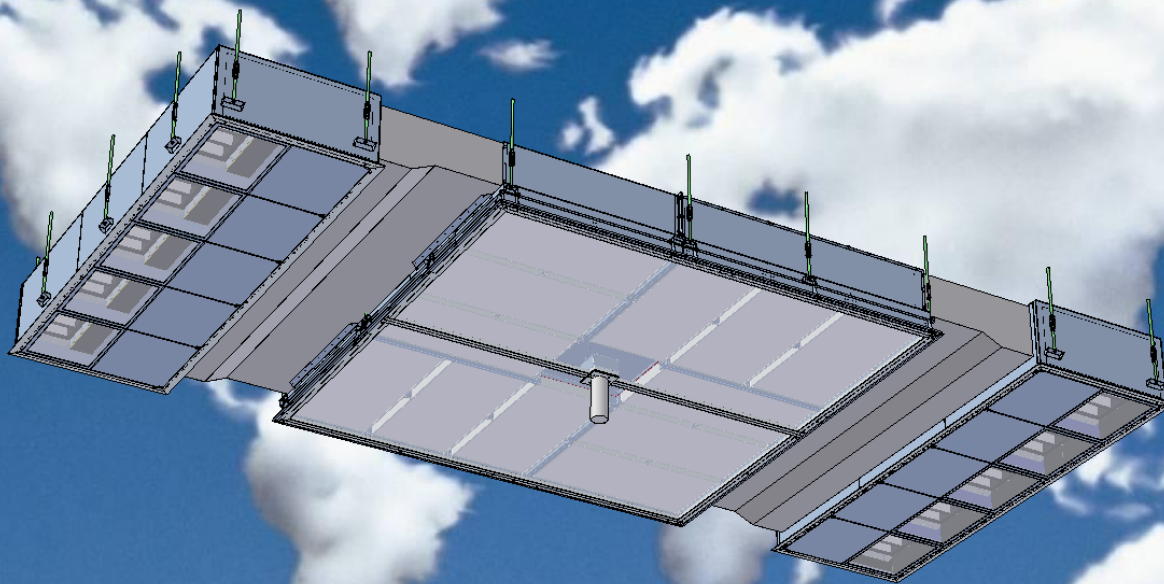


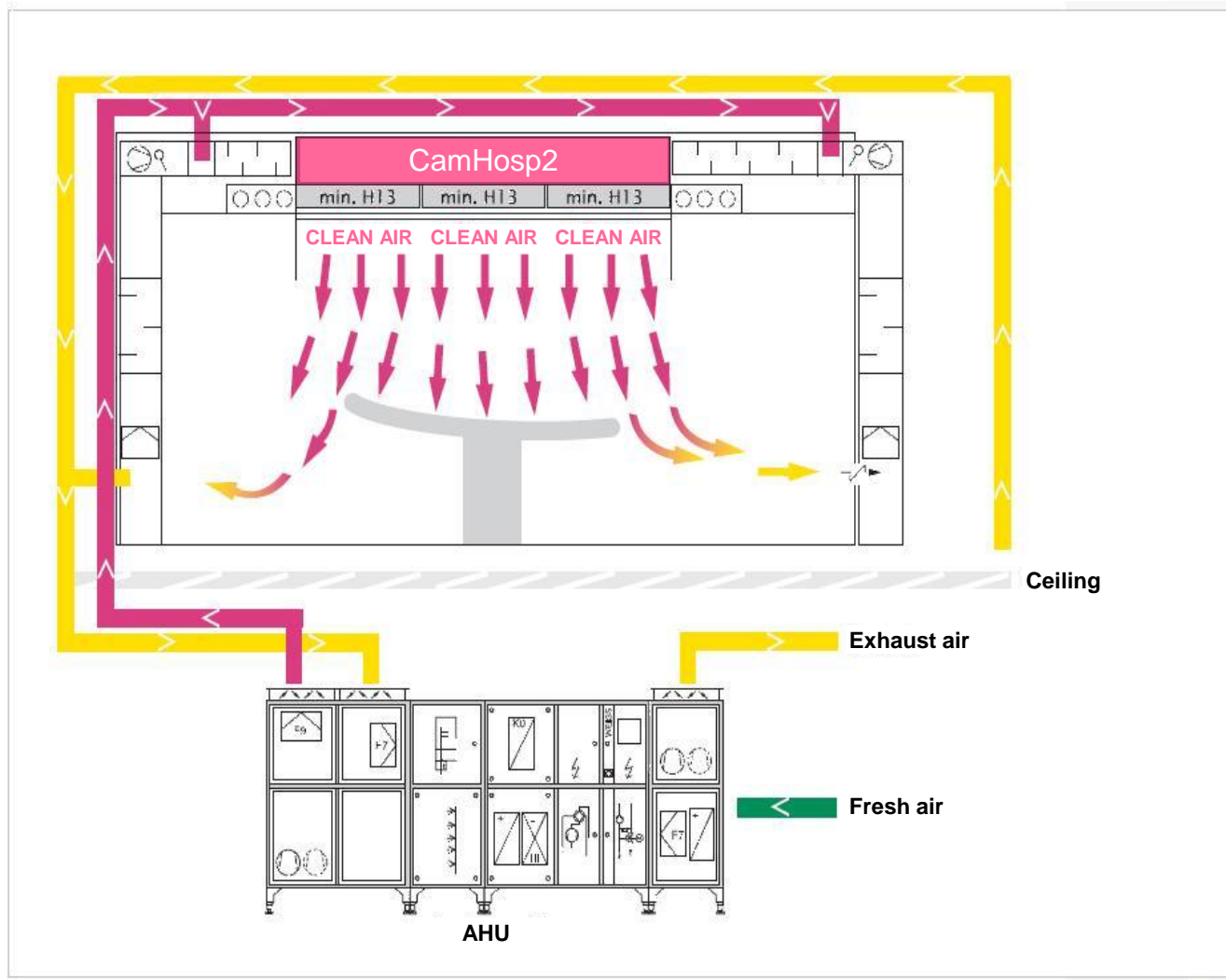
# CamHosp-R

## Features in Detail

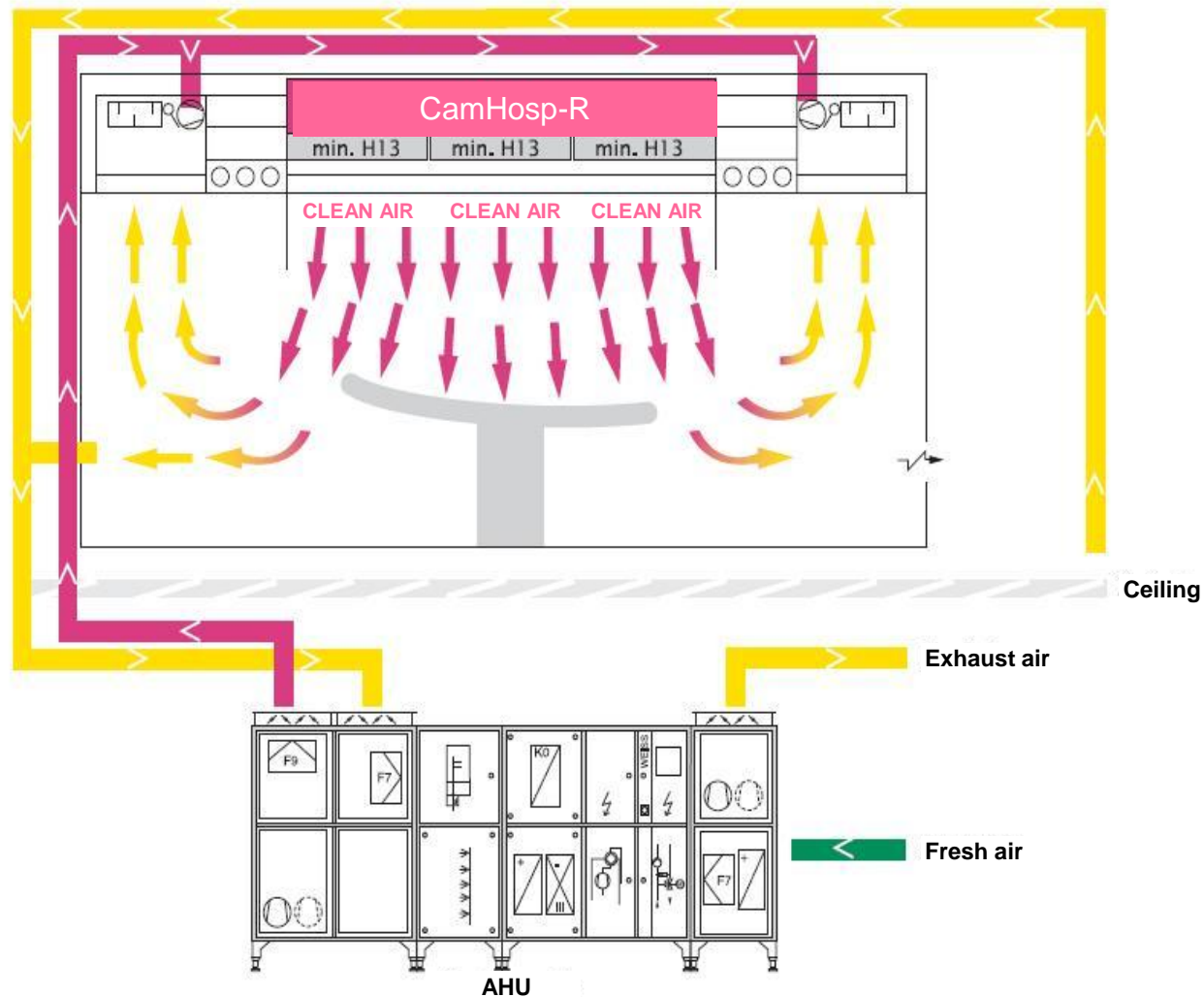


2009-07-01	Camfil Farr
CamHosp-R – MF	
Camfil Farr- clean air solutions	

# Principle of a ceiling system without recirculation



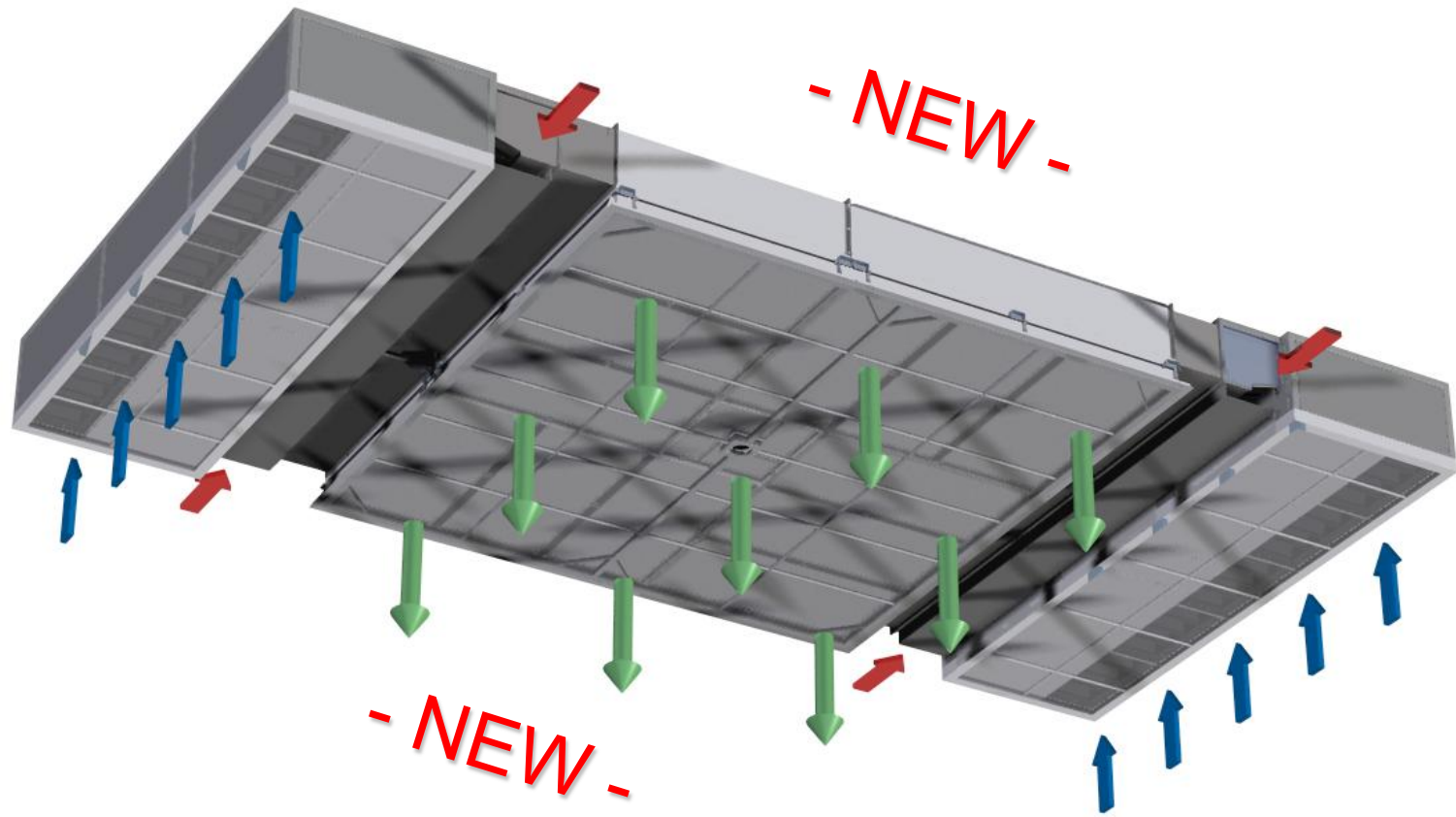
# Principle of a ceiling system incl. recirculation function



## General Function

- Recirculating (UCV) systems provide exactly what the name suggests:
  - Generally a 3m x 3m ultra clean zone in an operating theatre
  - This zone is used primarily when orthopaedic surgery is to be carried out
  - Also used for open heart and ophthalmic surgery
  - UCV systems assure a laminar flow clean zone by recirculating air from side areas of the operating theatre [70%] mixed with AHU-conditioned supply air [30%]
- The air entering the clean zone is supplied through generally 12 x H14 HEPA filters
- The recirculated air is firstly filtered by 6 x F7 pre-filters
- The air is circulated by 6 x three phase fans through a control system

## CamHosp-R Features





## Special gasket and clamping system

No sealing with silicone needed



## Divided Screentek Laminator



## CamHosp-R Installation

Filter section around surgical lamp



Adaption to the wall



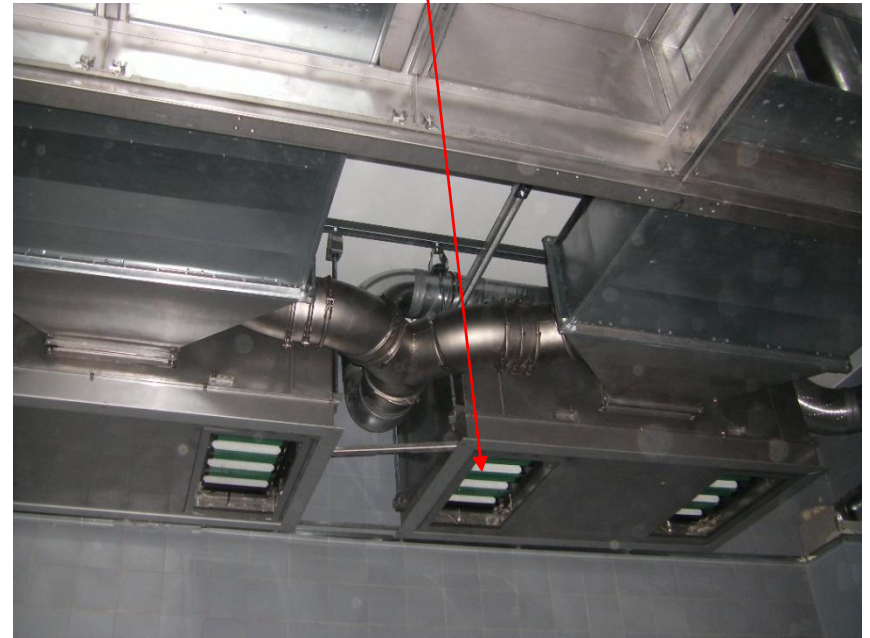


## CamHosp-R Installation



Soundabsorber

Prefilter Opakfil F7



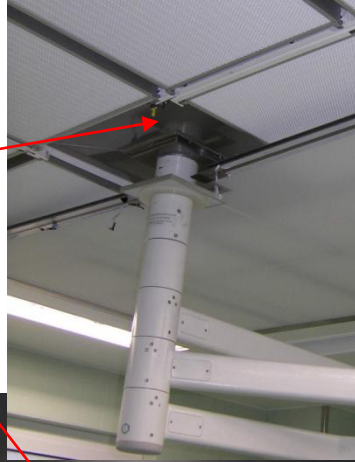
## Pressure plenum with filter installation

Even surfaces for easy cleaning / disinfection

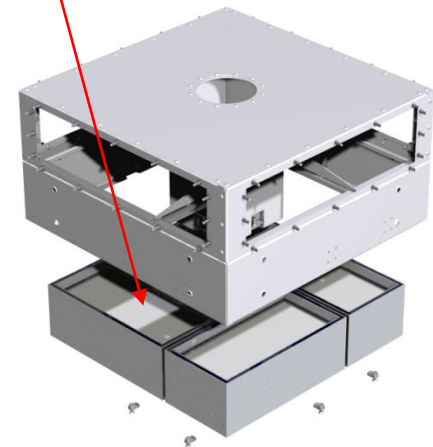


## OP Light installation

a) Standard  
blending



b) NEW !!!  
Filtersection H14 around  
surgical lamp



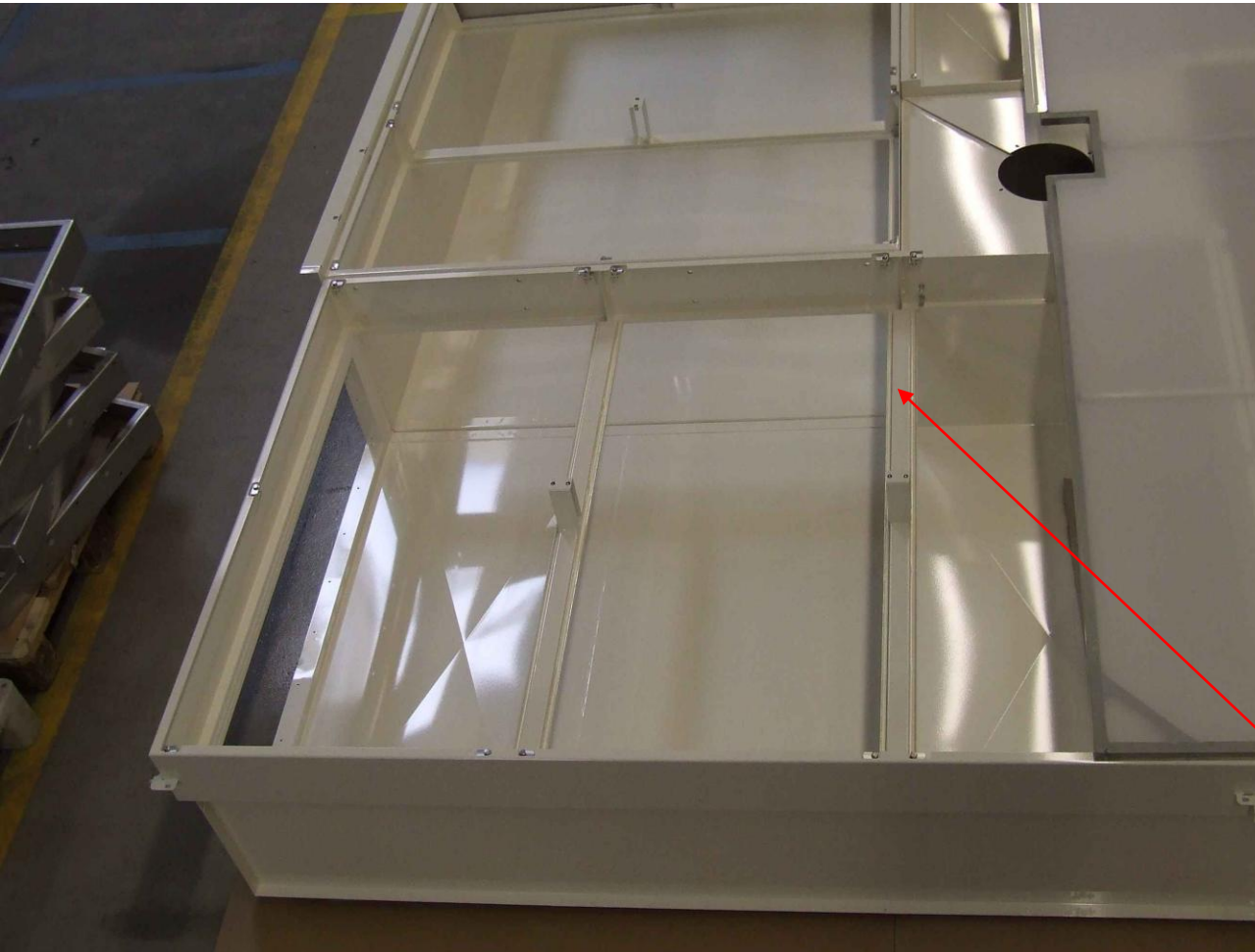
## Lighting system

Standard lighting system (eg. Zumtobel / Trilux) can be integrated around the clean zone on request





# HEPA-Filter with Gel-gaskets



Knife Edge

## Filterheight 130 mm



# Pressure drop measurement with H14 filter

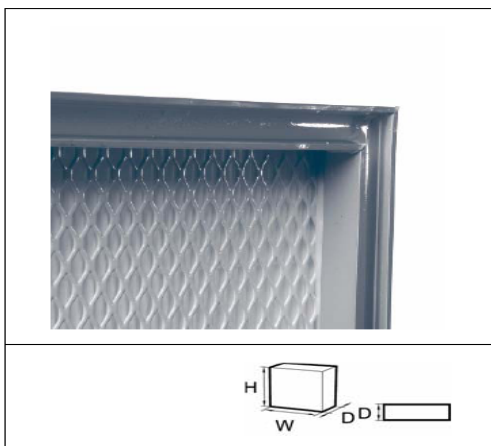
Basis: 8.000 m<sup>3</sup>/h with MG media pack

Pressure drop  
in the ceiling  
below  
**40 Pa**



# Filter performance

## Megalam MG14 for CamHosp-R



### Advantages

- High quality glass fibre media
- High efficiency

**Application:** HEPA filter for clean rooms and LAF units

**Type:** HEPA-Filter

**Frame:** Extruded and anodised aluminium

**Gasket:** Fluid SilGel; placed downstream

**Media:** Glass fibre

**Separators:** Hot-melt beads

**Grid:** Mild steel white (RAL 9010) epoxy paint, placed upstream

**Sealant:** Polyurethane (2-K-sealant)

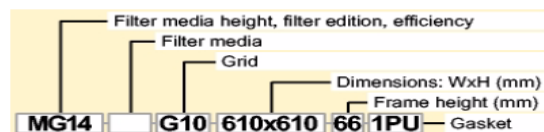
**Efficiency acc. EN 1822:** H14

**MPPS efficiency acc. EN 1822:**  $\geq 99,995\%$  at MPPS

**Temperature / Humidity:** 70° C / 100% RH

**Remarks:** All filters scantested acc. EN 1822

**Mounting system:** CamHosp-R operating theatre ceiling (recirculation unit)

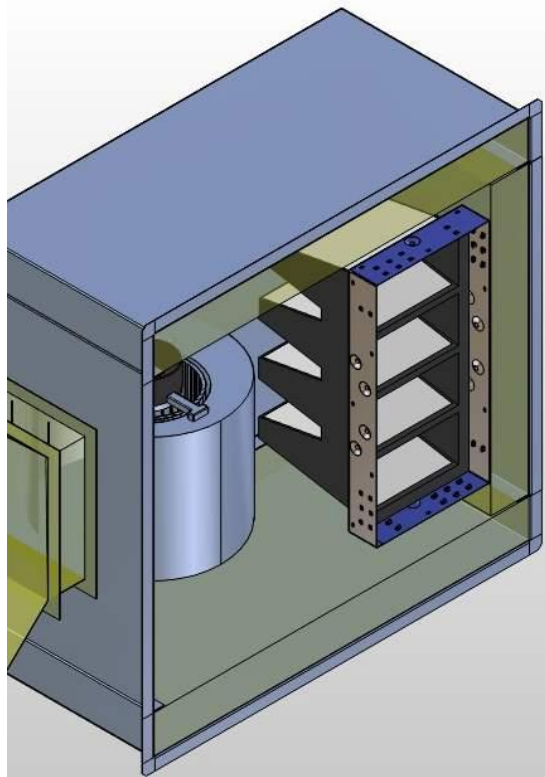


Type	Efficiency	Dimensions WxHxD (mm)	Media surface (m²)	Air flow / pressure drop at 0,25 m/s (m³/h / Pa)	Freight volume (m³)	Freight weight (kg)
MG14-G10-1182x564x130-GEL	H14	1182x564x130	31	490/40	0,160	16
<b>Filter for filtersection for path of operating theatre</b>						
MG14-G10-357x180x130-GEL	H14	357x180x130	2,8	60/40	0,01	2



# Integrated prefilter F7 in standard depth 292mm

(Possibility to alternatively install AMC prefilters)



## Exclusive use of standard components for ventilators und electronic control



## Media Bridges

Media bridges (eg. Dräger) can be integrated on request



Integration to the  
CamHosp-R done !

All validation tests performed  
acc. to the new DIN 1946-4 Dec. 2008







Thank you !

Any questions ??