

MEDICINE & AESTHETIC EQUIPMENT

APPLICATION

Protect yourself, your staff, and your patients with TBH Extraction- and Filtration Systems.

In the laser surgery aerosols will be generated with a particle size of $0,1\mu - 2\mu\text{m}$. Those laser aerosols (LGAC = Laser Generated Air-borne Contaminants) consist of several parts of human fabric. This one being removed from the fabric explosively as a steam or gas mixture. Dangers start out from microorganisms like bacteria, viruses and fungi. These have a particle size of smaller than 2μ and can be completely breathing in and therefore are deposited in the lungs. There is an acute infection risk with that for the operating staff and patient.

Please keep in mind, that the surgery facemask doesn't offer protection in front of air-supported particles. Up to 25% of the respiratory is passing the facemask! It was developed around the patient to protect him from an airborne infection by the operation staff.



Similar to image

AREAS OF APPLICATION:

- Cosmetic surgery (Skin removal, Hair removal, Alteration of epidermis)
- HF surgery
- Dental medicine
- Endoscopy

THE SYSTEM INCLUDES NUMEROUS FEATURES:

- Three optional extractors enables different processes and applications
- Electronic features and display functions
- Differential pressure indicator for monitoring the saturation filters
- Easy and clean filter change from the top
- Optimize convenience by using the optional foot switch

FUNCTIONAL PRINCIPLE

The contaminated air is collected by the collection unit (extractor hood, suction arm, hose, etc.) and transported into the filter unit directly or through a pipe or flexible hose. In the filter unit, the contaminant particles are filtered into different filter levels according to their size and in downstream molecular sieve (activated carbon Filter) the gaseous pollutants are largely removed. Afterwards the purified air can either be circulated back into the work area or diverted outdoors through an exhaust duct. Recirculating the air in the work area is a way to easily reduce energy costs.

PRODUCT FEATURES



THREE OPTIONAL EXTRACTORS ENABLES DIFFERENT PROCESSES AND APPLICATIONS

Extraction Tube (included in our standard model)

The extraction tube is generally used for smoke and debris where there is no grid cover required.

1. *Extraction Tube with integrated protection grid to avoid extraction of foreign objects.*

The grid is a convex design to reduce the risk of material being sucked onto the grid surface during a procedure, blocking air flow. In addition, the protective grid prevents the extraction of foreign objects - non-intentionally or intentionally - that might block the extraction arm (optional).

2. *A reducer fitting that allows for the attachment of smaller diameter hoses (10.5 - 22 mm).*

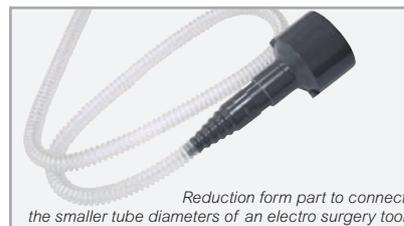
The shown reducer can be attached at the end of the extraction arm. This enables the connection of electro-surgical pencils and their smoke evacuation hand piece. That gives you the opportunity to use one extraction system for all your procedures and applications. These smaller hoses are often used to keep accessibility and visibility at a maximum (optional).



Extraction tube



Extraction Tube with protection grid



Reduction form part to connect the smaller tube diameters of an electro surgery tool



3. Transparent extraction hood enables a wider coverage of pollution

The extraction hood - dimension of 330x240 mm - enables a wider coverage of pollution. The transparent design – polycarbonate - allows a free view for the surgeon to the working surface (optional).



4. Transparent extraction hood enables a wider coverage of pollution

The extraction hood - dimension of 245x220 mm - enables a wider coverage of pollution. The transparent design – polycarbonate - allows a free view for the surgeon to the working surface (optional).



5. Transparent extraction hood enables a wider coverage of pollution

The extraction hood - diameter 385 mm - enables a wider coverage of pollution. The transparent design – polycarbonate - allows a free view for the surgeon to the working surface (optional).



CONTROL ELECTRONICS

The BF-series systems feature **INSPIRE** control electronics in its basic configuration:

- Switching between run/standby
- Manual adjustment of the rotation speed
- Filter-saturation indicator of the extraction system
- Visual and acoustic display of the filter saturation
- Fault display and notification



INTERFACE:

- System start/stop
- Warning at a filter saturation of 75%
- Preselection of run/standby at the system start-up

The extraction and filter system can thus easily be integrated into the customer system.

OPERATING ELEMENTS:

- A) Switching between run/standby
- B) Manual adjustment of the rotation speed
 - 1) Filter-saturation indicator
 - 2) System status indicator
 - 3) Performance-setting indicator/ operating-hours meter
 - 4) Temperature and turbine-malfunction indicator (except of BF9 Set-D)
 - 5) Filter status indicator

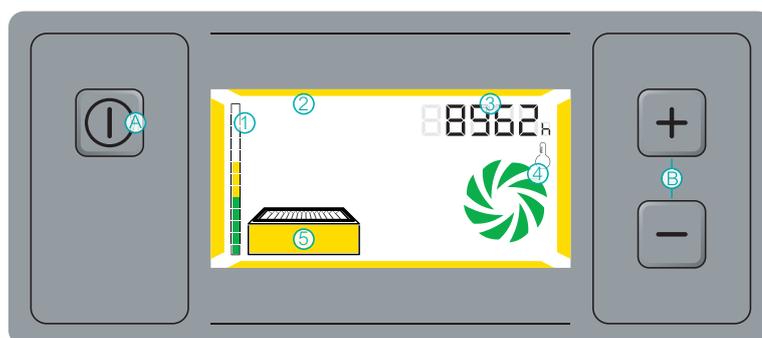


Figure 1

EASY AND CLEAN FILTER CHANGE FROM THE TOP

The TBH design concept enables easy access from the top to the different filter stages. This makes filter changing simple and clean.



OPTIMIZE CONVENIENCE BY USING THE OPTIONAL FOOT SWITCH

The optional foot switch provides a hands free Standby / Run operation. The foot switch is easily connected at the interface.



ADSORPTION OF GASEOUS SUBSTANCES

Activated carbon is used for the adsorption of gaseous substances. The activated carbon facilitates a physical adsorption process so a wide range of gases and odours can be collected.

