MEDAP

ATMOS MedizinTechnik

For a smoke-free OT!

ATMOS® Smoke Evacuation

ATMOS® Smoke Evacuation

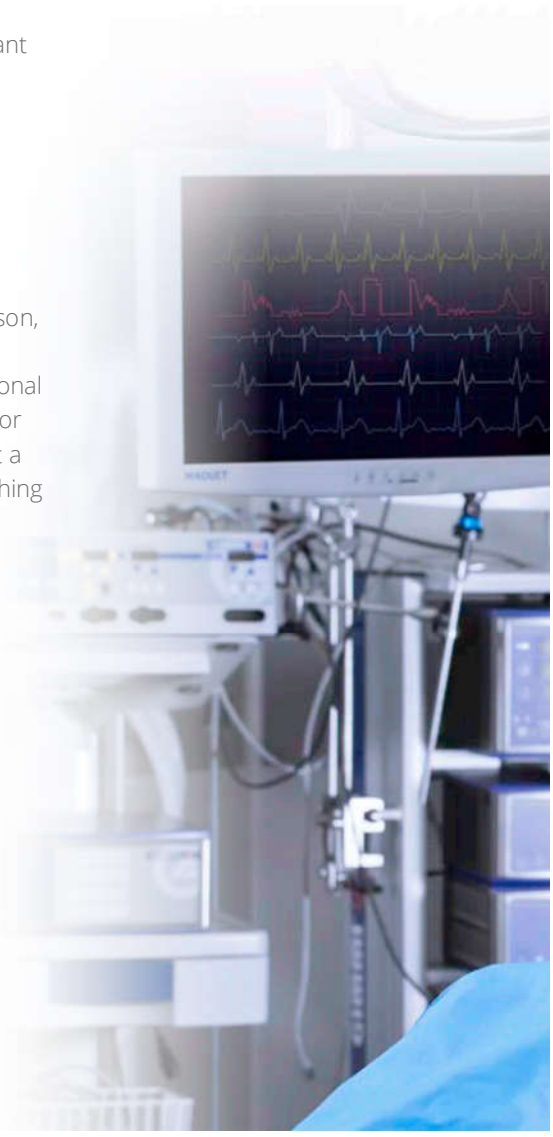
Dangers of surgical smoke!

During cutting and coagulating with HF, RF, ultrasonic or laser, biological tissue, blood and fluids are stimulated to the point of pyrolysis. A total of 41 different chemical substances have been verified in surgical smoke, some of which are highly toxic. Toxicological studies identified erythrocytes and living cell material, as well as biological contaminants such as viruses, bacteria, mycobacteria and fungi. Even viral DNA and HIV DNA have been found in hoses used for smoke evacuation. In addition, inorganic and organic substances, such as carbon monoxide, benzene, formaldehyde, toluene and carcinogenic toxins have been detected.

Inhaling the particles contained in the surgical smoke can lead to irritation of the throat and nose, as well as respiratory problems or allergic reactions. The particles penetrate deep into the alveoli of the operating team, from where they can be absorbed by blood. This can result in pulmonary inflammations and has been proven to be carcinogenic.

The smoke that develops during operations is associated with unpleasant odours. This results in a drop in the air quality in the operating theatre that can lead to headaches and nausea in the OT team. The organic components of the surgical smoke are well-known to cause tiredness and a feeling of faintness, as well as cardiac arrhythmia and breathing difficulties.

Classic protection methods such as surgical masks and laminar flow provide only insufficient protection against surgical smoke. For this reason, the International Section of the ISSA recommends in its latest working paper from 2011 that, in order to prevent work accidents and occupational illness in the healthcare sector, a „smoke evacuation should be set up for surgical smoke at the point of development. This measure ensures that a majority of the vapour, gases or particles never even reaches the breathing zone of employees“.



Protection for the OT team

- Targeted evacuation of surgical smoke before it reaches the breathing zone of the OT team
- Prevention of health risks caused by surgical smoke

Improvement of the air quality

- Significant improvement of unpleasant odours thanks to activated carbon filter
- Prevention of health problems such as headaches, nausea, tiredness, feelings of faintness, cardiac arrhythmia and breathing difficulties

No impairment of vision

- Improved view of the operating area, particularly in laparoscopy

Improvement of patient recovery

- Preventing the absorption of individual gas components in the patient's bloodstream during laparoscopy

FUMOVAC 700

The powerful, compact smoke evacuation device FUMOVAC 700 is designed for continuous operation in surgery and offers an exceptionally low-noise suction capacity of 700 l/min. It fulfils the requirements of modern HF, RF, ultrasonic and laser surgery.

The four-stage high-performance filter is fitted with three different sizes of inputs, tailoring it to suction hoses with a diameter of 22 mm (7/8”), 9.5 mm (3/8”) and 6.4 mm (1/4”). The inputs are secured by means of magnetic flaps.

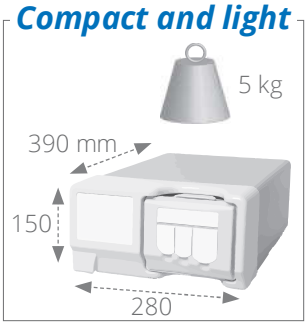
Universally usable thanks to extra-compact dimensions

Intuitive and secure operation

Excellent contamination protection

Compact and light

Dimensions and weight are 50% smaller than the predecessor model, ensuring exceptionally easy and space-saving integration into the surgical environment.



Control panel

It is operated using just two buttons. LEDs indicate the operating status, the suction capacity selected, the remaining filter life time and possible need for servicing.

High-performance filter

The filter is particularly efficient thanks to its four filter stages, three inputs with magnetic flaps, and a filter life time of up to 35 hours.

AtmoSafe

The AtmoSafe smoke evacuation device fulfils the requirements of modern HF, RF and laser surgery thanks to its suction capacity of 650 l/min. The suction capacity is infinitely variable. ATMOS provides a six year warranty for the brushless blower.

The filter status display measures the air passage and determines the service life of the main filter, which is generally more than 35 hours. Connecting an HEPA filter upstream can extend the filter life time of the main filter.

Easy operation

Effective filter

Can be used with HF devices and lasers

Control panel

Simple control panel with preset buttons for base flow, operation flow and lag time, as well as displays for suction capacity and filter capacity.

Main filter unit

The main filter consists of a ULPA filter, three activated carbon filter layers and one gas filter. The filter life time is normally more than 35 hours.

Interlink cable

With the interlink cable or the ISA network cable connection, the suction device can easily be connected to HF devices and lasers so that suction starts up when the devices are activated.

Accessories for a variety of

To ensure an optimum workflow, there is a remote control available that only activates the smoke evacuation device when surgical smoke develops. A comprehensive range of suction hoses rounds out the product line for smoke evacuation.

To ensure an optimum workflow, the FUMOVAC 700 can be integrated into all conventional HF towers or it can be placed on the platforms for ceiling supply units. If space is at a premium, an individually adjustable suspension option guarantees that the FUMOVAC 700 can be fitted stably to the platforms of ceiling supply units. A special trolley enables optimum positioning inside the OT workflow.

indications

Automatic evacuation of surgical smoke

Optimised pencil with built-in smoke evacuation

Indication-specific suction hoses

The automatic HF remote control detects currents when the HF pencils are switched on and off and switches the smoke evacuation device on and off at the same time. If desired, a lag time of 0 to 10 seconds can be set.

Remote control

The hose set contains three blade electrodes with non-stick coating and 3 m connection cable with 3-pin plug.

Disposable pencil

The laparoscopic hose set has a special flow limiter to ensure minimum gas losses.

Laparoscopic hose set

Overview

Basic device	FUMOVAC 700	AtmoSafe
Max. flow rate	700 l/min	650 l/min
Flow rate adjustment	3 stages	infinitely variable
Display	LEDs	LEDs
Base flow	–	adjustable
Adjustable lag time	0 – 10 sec; adjusted on the remote control	0 – 100 sec; adjusted on the device
Volume	max. 55 dB(A)	max. 52 dB(A)
Dimensions (H x W x D)	150 x 280 x 390 mm	210 x 410 x 370 mm
Weight	5.0 kg (with filter) 4.0 kg (without filter)	13.6 kg (with filter) 12.7 kg (without filter)
Foot switch	✓	optional
Remote control for HF devices	optional	–
Interlink cable connection	–	optional
Cold device power connection for HF devices	–	optional
Filter		
Number of inputs	3	1
ø 22 mm (7/8")	✓	✓
ø 9.5 mm (3/8")	✓	–
ø 6.4 mm (1/4")	✓	–
Contamination protection of filter inputs	Magnetic flaps	–
Number of filter stages	4	3
Pre-filter	integrated	separate
Filter life time	18 / 24 / 35 hours	depending on the flow rate and contamination; more than 35 hours

Vacuum Extraction

Surgical Suction

Wound Drainage

ATMOS®

Cardiothoracic Drainage

Oxygen Supply

Bronchial Suction

Smoke Evacuation

Product Range

Mobile Oxygen Supply

Suction with CGS

For more information about the entire product range "ATMOS® Medical Suction Systems" visit:

www.atmos-medap.com

MedizinTechnik

ATMOS MedizinTechnik GmbH & Co. KG
Ludwig-Kegel-Str. 16
79853 Lenzkirch / Germany
Tel: +49 7653 689-0
atmos@atmosmed.de

For more information about the
entire product range
“ATMOS® Smoke Evacuation” visit:
www.atmos-medap.com

PR4GB.220000.0 • 2018-05 Index: 01, Errors and omissions excepted.