SHE SHA SMOKE EVACUATION SYSTEM EFFECTIVE PROTECTION, EASY HANDLING





SHE SHA Smoke extraction for a smoke-free operating theatre

Electrosurgery fumes are hazardous

Fumes from surgical operations using HF current, lasers or ultrasonic instruments are hazardous to health, create an odour nuisance, and hamper vision in the operation area. The SHE SHA smoke evacuation unit from BOWA effectively removes and filters operation fumes and aerosols directly at the source. Smoke Evacuation

Efficient electrosurgery fume extraction

3/8' (9.5 mm

The SHE SHA is easy to use, with flexibility to cover a wide range of surgical procedures. The low noise level and the long life of the four-stage filter (activation time up to 35 hours) set a new standard.

ation System

SHESHA

The filter is automatically detected and the remaining lifetime is indicated. The suction power can be set to three different levels. Activation is fully automatic via a universal sensor that can be connected to every electrosurgery device to limit activation to when fumes are actually present.

Health hazard from surgical fumes

Along with obvious physical impairments to operating theatre staff from surgical fumes, such as odour nuisance and limited vision in the operation area, the health risk from surgical fumes should not be ignored.

Surgical fumes consist of a complex mixture of biological, cellular, particulate, gaseous and vapour components. The main component is water vapour, however, the other components - including harmful particles and viruses are hazardous.

The size of the particles in the fumes can vary greatly, from less than 10 nanometres to more than 200 micrometres. For example, the average particle size with electrocautery instruments is less than 0.1 micrometre, and with ultrasonic scalpels it is about 0.35 to 0.65 micrometre. This means that a very large volume of these small particles can be inhaled and deposited in the alveoli in the lungs.

Possible health risks from surgical smoke fumes, depending on the dose level:

- Eye irritation
- Streaming eyes
- Sneezing
- Irritation of the nasopharyngeal cavity
- _ Acute or chronic inflammation of the respiratory tract (bronchitis, asthma, emphysema)
- Headaches
- Weakness
- Nausea, vomiting

- Anxiety, discomfort
- Hypoxia, dizziness
- Colic
- Cardiovascular disorders
- Hepatitis
- HIV infection
- Dermatitis
- Anaemia
- Leukaemia _
- Carcinoma





SHE SHA filter

The only effective protection against surgical fumes is extraction and filtration directly at the source, using a smoke evacuation unit.

Face masks

It has been shown that face masks such as are commonly worn in operating theatres do not provide adequate protection against particles and germs. 4

Compact design, effective extraction

Automatic activation by sensor Compatible with all electrosurgery devices Quiet and powerful Max. 55 dB(A) – conversation level Simple to handle Automatic plug & play filter recognition



Versatile and reliable

BOWA single use smoke evacuation handles (are available in several versions) are perfect partners for the SHE SHA smoke evacuation system.



Enhanced adaptability

The electrode handpiece with SHE SHA tube can be easily adapted in length and rotated up to 360° .

Compact solution The tube, handpiece and electrode are immediately ready for use and have an internal cable.

Ordering information 🛛 🛛 🗠 🖼 🖬 🕄 🗛 🖬 🖻 🕿 📾 🕒 🗅 🔎 🕰

	SHE SHA smoke evacuation system with activation sensor and pneumatic foot switch	950-001
	SHE SHA filter with up to 35 hours lifetime (2 pcs.)	951-001
STERILE	SHE SHA handpiece, adjustable length, 2 buttons, knife, 3 m, single-use, sterile (10 pcs.), with holster	802-033
STERILE	SHE SHA handpiece, 2 buttons, knife, 3 m, single-use, sterile (10 pcs.), with holster	802-032
STERILE	SHE SHA hose, for laparoscopy, 3 m, single-use, sterile (12 pcs.)	952-200
CONTRACTOR STERILE	SHE SHA hose, for handpiece, 3 m, single-use, sterile (10 pcs.)	952-001

These products have the CE mark in accordance with Directive 93/42/EEC and are compliant with IEC 60601-2-2.

SHE SHA Smoke evacuation system	950-001
SHE SHA Remote sensor	included
Pneumatic foot switch	included

Technical data

Summary specifications	SHE SHA
Acoustic emission	Max. 55 dB(A)
Size (H x W x D)	15 x 28 x 39.5 cm
Flow rate	Max. 708 litre/min (with 22 mm tube)
Weight	4.4 kg (5.5 kg with filter)
Filter type	Four-stage filtration (prefilter, ULPA, active charcoal, postfilter)
Particle size	0.1–0.2µm at 99.999% efficiency
Supply voltage	100-120V/220-240V



BOWA-electronic GmbH & Co. KG Heinrich-Hertz-Strasse 4 – 10 72810 Gomaringen I Germany

Phone +49 (0) 7072-6002-0 Fax +49 (0) 7072-6002-33 info@bowa.de I bowa-medical.com

