

Megadyne™

Flexibility in. Smoke out.

Minimize exposure to surgical smoke¹
with a smoke evacuation portfolio that
delivers all-around flexibility.²

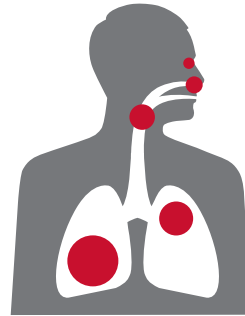


ETHICON
Johnson & Johnson SURGICAL TECHNOLOGIES

Why smoke evacuation?

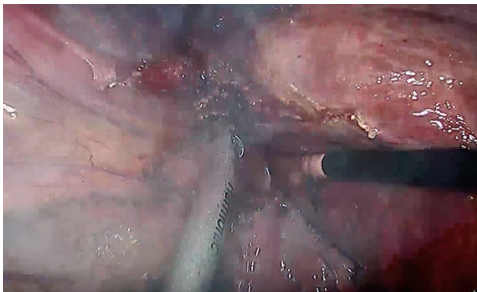
Surgical smoke may negatively impact your OR environment and surgical-site visibility.

Potential health risks of surgical smoke

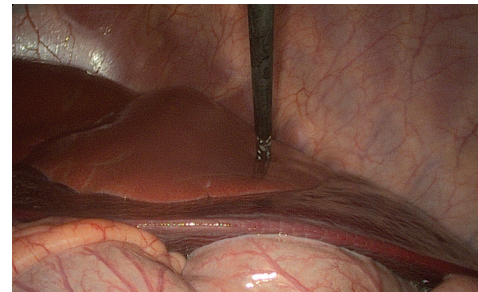


According to the CDC, exposure to surgical smoke can cause both acute and chronic health effects ranging from **eye, nose and throat irritation to emphysema, asthma or chronic bronchitis**.¹

How smoke impacts visibility



Surgical site with smoke



Surgical site without smoke



What's in electrosurgery smoke?

It can contain a wide variety of different materials and compounds, including:

- Toxic gas and viruses²
- Dead and live cellular material, including blood fragments and viruses²
- Irritant, carcinogenic and neurotoxic compounds³
- Carbon monoxide
- Formaldehyde
- Benzene
- Toluene
- Hydrogen cyanide

MEGADYNE™ Smoke Evacuation products can help you minimize exposure to surgical smoke⁴ and improve surgical-site visibility.

¹ NIOSH Study Finds Healthcare Workers' Exposure to Surgical Smoke Still Common. Nov 3, 2015 (075012-190205). ² Control of Smoke from Laser/Electric Surgical Procedures, NIOSH, DHHS (NIOSH) Publication No. 96-128. (075004-220415). ³ Al Sahaf OS, et al., Chemical composition of smoke produced by high-frequency electrosurgery. Ir J Med Sci. 2007 Sep;176(3):229-32 (075005-190205) ⁴ (120892-190815)

MEGADYNE™ Smoke Evacuator

Megadyne Smoke Evacuator is designed to have effective and quiet performance for open and laparoscopic procedures.¹

Filter is designed to capture particulate and microorganisms of 0.1-0.2 microns at 99.999% effectiveness



Automatically activates with monopolar, bipolar, ultrasonic and advanced bipolar

Designed to be intuitive and simple to use

Flexible

- Allows users to adjust run time
- Supports continuous smoke evacuation under manual mode

Comprehensive

- Adjustable flow rate to accommodate insufflation air flow to maintain peritoneum pressure in laparoscopic procedures

3 ways to activate

Connect cable

Automatically detects energy device activation to trigger smoke evacuation



RF sensor

Automatically detects monopolar device activation to trigger smoke evacuation



Manual start/stop button

Push button to start or stop smoke evacuation



¹ Captures and filters 99.9999% of particulates and microorganisms 0.02 to 0.1 microns, at 50 +/- 10 dBA per IEC 60601-1 @ 1m. (100280-211115)

MEGADYNE™ MINI VAC™ Smoke Evacuator

User-friendly design

- The electronic controls on the face panel have been designed to be user-friendly and facilitate setup and operation
- Filter Life Indicator provides a clear signal of the status of the life of the filter in use (filters have up to 35 hours of life)

Efficient

- MEGADYNE™ Micro Safe Filter contains four different stages to capture smoke plume; this includes a ULPA-grade filter that captures particulates and microorganisms from 0.1 to 0.2 microns at an efficiency of 99.999%
- Activates via on/off switch, footswitch, or RF sensor automatic activation device

Quiet

- Designed with an ultra-quiet, high-suction, high-flow-rate vacuum motor¹



MEGADYNE™ Micro Safe Filter



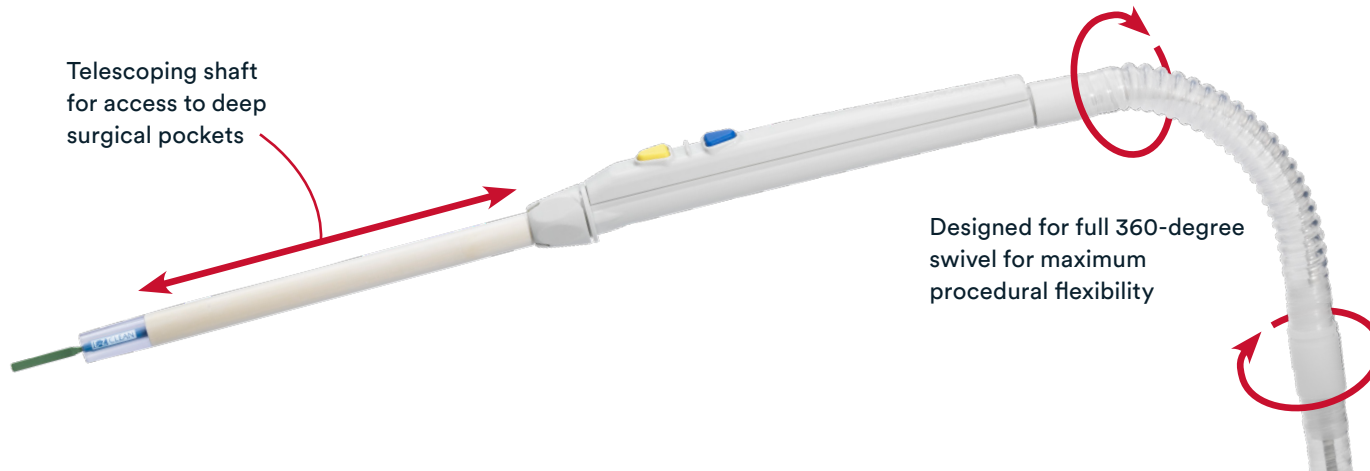
MEGADYNE™ EZ Link RF Sensor



Footswitch (included with evacuator)

MEGADYNE™ Telescoping Smoke Evacuation Pencil

With an adjustable working length, the MEGADYNE™ Telescoping Smoke Evacuation Pencil is designed for **efficient smoke evacuation** at the source.



Visibility

- Adjustable length of the shaft helps position the smoke evacuation tip closer to the surgical site; designed to provide efficient smoke evacuation

Surgeon comfort

- Cord in tubing was designed for comfort and ease of use
- Features tactile buttons for high user feedback

Efficiency

- Adjustable shaft minimizes the need to exchange electrodes
- MEGADYNE™ E-Z CLEAN™ Electrosurgical Electrodes with PTFE produced 68% less smoke vs. uncoated stainless steel blades¹

Secure telescoping shaft length at any position from fully extended to fully retracted



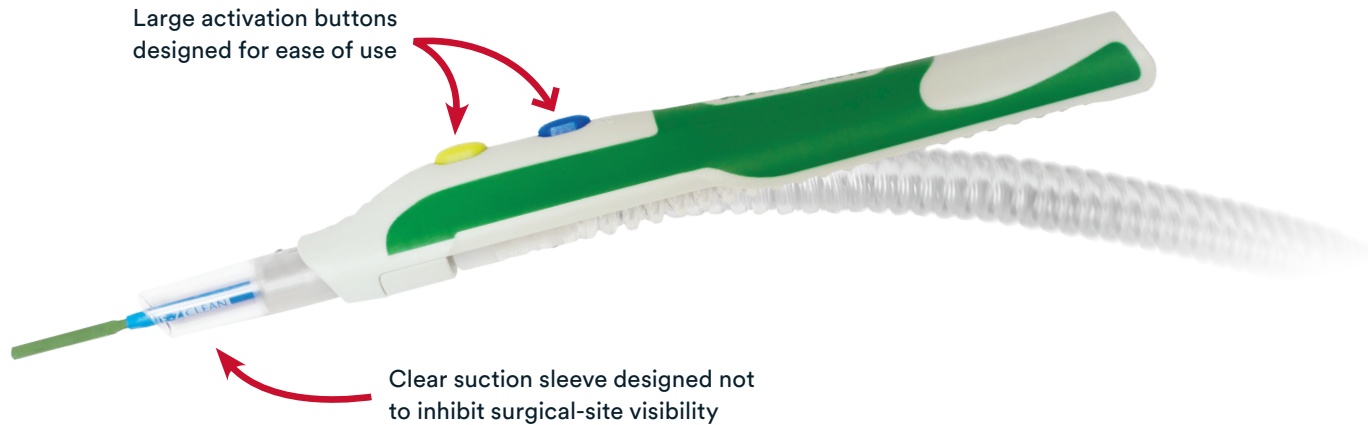
Fully compatible with more than 16 different smoke evacuators from 12 manufacturers.



¹ In a preclinical porcine model at 60W vs. uncoated stainless steel blades at 60W (p<0.001). Kisch T, et al. Electrocautery Devices with Feedback Mode and Teflon-Coated Blades Create Less Surgical Smoke for a Quality Improvement in the Operating Theater. Medicine, 2015;94(27) (074999-190121).

MEGADYNE™ ZIP-PEN™ Smoke Evacuation Pencil

The MEGADYNE™ ZIP-PEN™ Smoke Evacuation Pencil captures smoke at the source for **efficient smoke removal¹** while **delivering a comfortable, ergonomic experience** for surgeons.



Visibility

- Encapsulates the electrode for effective smoke capture

Surgeon comfort

- Lightweight and designed to minimize hand fatigue³
- Designed with a non-slip grip for comfort and control⁴

Efficiency

- MEGADYNE™ E-Z CLEAN™ Electrosurgical Electrodes with PTFE produced 68% less smoke vs. uncoated stainless steel blades²

3 ergonomic, non-slip grip positions

“Trigger” grip method

Eliminated 100% of the torque off the back end of the pencil for improved surgeon ergonomics⁵



“Over the hand” grip method

This grip reduces torque by draping the tubing over the surgeon’s thumb or back of the hand



“Traditional” grip method

Tubing can be kept in the full upright position (as shown) to emulate a traditional pencil



¹ Benchtop testing comparing Zip Pen to predicate Ultra Vac on max setting of various smoke evacuator devices (p<0.05) (075027-170621) ² In a preclinical porcine model at 60W vs. uncoated stainless steel blades at 60W (p<0.001). Kisch T, et al. Electrocautery Devices with Feedback Mode and Teflon-Coated Blades Create Less Surgical Smoke for a Quality Improvement in the Operating Theater. Medicine, 2015;94(27) (074999-190121). ³ 075023-170621 ⁴ 075025-170621 ⁵ Only when in “trigger” configuration. (075019-170621)

Ordering information

MEGADYNE™ Smoke Evacuation Pencils and Shrouds



Description	Catalog number	Quantity
MEGADYNE™ Telescoping Smoke Evacuation Pencil, 10-Foot (3m) Tubing	251010J	20/box
MEGADYNE™ Telescoping Smoke Evacuation Pencil, 15-Foot (4.5m) Tubing	251015J	20/box
MEGADYNE™ Telescoping Smoke Evacuation Pencil, 10-Foot (3m) Tubing, Bulk Non-Sterile	251010BN	n/a
MEGADYNE™ Telescoping Smoke Evacuation Pencil, 15-Foot (4.5m) Tubing, Bulk Non-Sterile	251015BN	n/a
MEGADYNE™ ZIP-PEN™ Smoke Evacuation Pencil, 10-Foot Tubing	252510	20/box
MEGADYNE™ ZIP-PEN™ Smoke Evacuation Pencil, 10-Foot Tubing with 22mm Connector	252510EC	20/box
MEGADYNE™ Attacha Vac Smoke Evacuation Shroud	212009J	25/box
MEGADYNE™ Attacha Vac Smoke Evacuation Shroud with 22mm Connector	212009EC	25/box

MEGADYNE™ Smoke Evacuators and Accessories



Description	Catalog number	Quantity
MEGADYNE™ Smoke Evacuator	MESE1	1 EA
MEGADYNE™ Filter	2550J	1 EA
MEGADYNE™ Fluid Trap	2555J	10/box
MEGADYNE™ RF Sensor	2255J	1 EA
MEGADYNE™ Connect Cable, 1m	2403J	1 EA
MEGADYNE™ Connect Cable, 2.1m	2406J	1 EA
MEGADYNE™ Laparoscopic Tubing	2390J	25/box
MEGADYNE™ Speculum Tubing	2395J	25/box
MEGADYNE™ MINI VAC™ Smoke Evacuator, 110V	ECVV120	1 EA
MEGADYNE™ MINI VAC™ Smoke Evacuator, 210V	ECVV220	1 EA
EZ Link RF Sensor for MINI VAC™ Smoke Evacuator	MGEZLINK01	1 EA
MEGADYNE™ Micro Safe Filter 1 pk	MGVS353	1 EA
MEGADYNE™ Micro Safe Filter 2 pk	MGVS35302	2/box
Fluid Trap for MINI VAC™ Smoke Evacuator	MGVSFT10	10/box

How to order

All purchase orders are made to Johnson & Johnson Health Care Systems, Inc. (JJHCS).

If you want to order direct, you may order electronically (online) at:

- <https://us.jjcustomerconnect.com> or 1-866-565-4283
- Electronic Data Interchange (EDI) Helpline: 1-800-262-2888

Or, to place a non-electronic (manual) order, contact Johnson & Johnson Health Care Systems Inc. at 1-800-255-2500 8:30 a.m.-6:30 p.m. (Eastern Standard Time) or fax us at 1-732-562-2212.

Customer support

For product use assistance, clinical guidelines, service and repair, emergency assistance, copy of a 510(k) clearance letter, or complaints, please contact our Customer Support Center by calling 877-ETHICON (384-4266). Our support center is staffed 24 hours a day, 7 days a week by qualified nurses to answer your product-related questions.

Learn more at [ethicon.com](https://www.ethicon.com)