

Megadyne™

# Flexibility in. Smoke out.

Minimize exposure to surgical smoke<sup>1</sup>  
with a smoke evacuation portfolio that  
delivers all-around flexibility.<sup>2</sup>

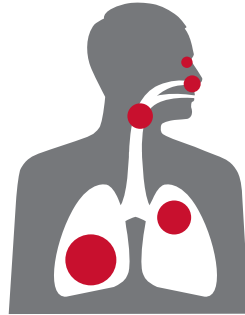


**ETHICON**  
Johnson & Johnson SURGICAL TECHNOLOGIES

# Why smoke evacuation?

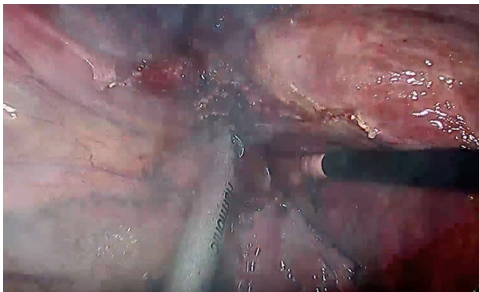
Surgical smoke may negatively impact your OR environment and surgical-site visibility.

## Potential health risks of surgical smoke

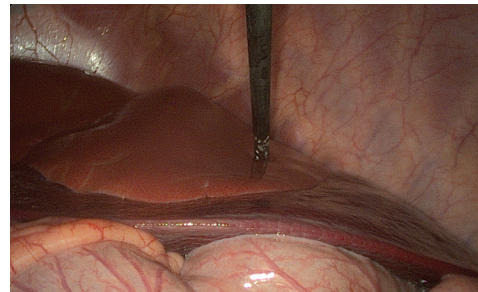


According to the CDC, exposure to surgical smoke can cause both acute and chronic health effects ranging from **eye, nose and throat irritation to emphysema, asthma or chronic bronchitis.**<sup>1</sup>

## 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 viruses<sup>2</sup>
- Dead and live cellular material, including blood fragments and viruses<sup>2</sup>
- Irritant, carcinogenic and neurotoxic compounds<sup>3</sup>
- Carbon monoxide
- Formaldehyde
- Benzene
- Toluene
- Hydrogen cyanide

**MEGADYNE™ Smoke Evacuation products can help you minimize exposure to surgical smoke<sup>4</sup> and improve surgical-site visibility.**

<sup>1</sup> NIOSH Study Finds Healthcare Workers' Exposure to Surgical Smoke Still Common. Nov 3, 2015 (075012-190205). <sup>2</sup> Control of Smoke from Laser/Electric Surgical Procedures, NIOSH, DHHS (NIOSH) Publication No. 96-128. (075004-220415). <sup>3</sup> 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) <sup>4</sup> (120892-190815)

# MEGADYNE™ Smoke Evacuator

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

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



## 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



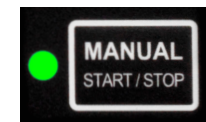
### RF sensor

Automatically detects monopolar device activation to trigger smoke evacuation



### Manual start/stop button

Push button to start or stop smoke evacuation



# 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 motor<sup>1</sup>



MEGADYNE™ Micro Safe Filter



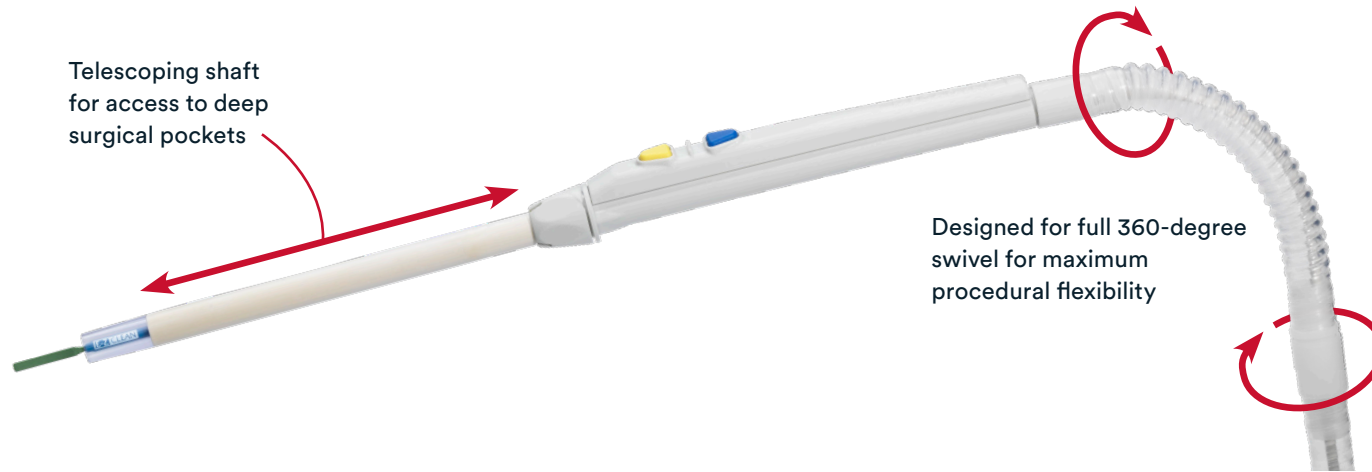
MEGADYNE™ EZ Link RF Sensor



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 blades<sup>1</sup>

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



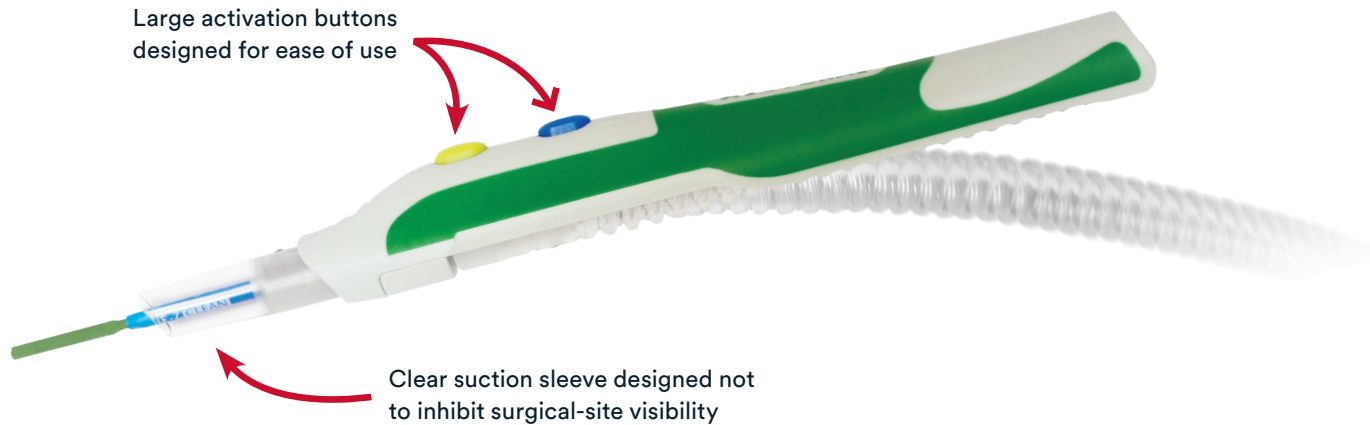
Fully compatible with more than 16 different smoke evacuators from 12 manufacturers.



<sup>1</sup>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 removal**<sup>1</sup> while delivering a **comfortable, ergonomic experience** for surgeons.



## Visibility

- Encapsulates the electrode for effective smoke capture

## Surgeon comfort

- Lightweight and designed to minimize hand fatigue<sup>3</sup>
- Designed with a non-slip grip for comfort and control<sup>4</sup>

## Efficiency

- MEGADYNE™ E-Z CLEAN™ Electrosurgical Electrodes with PTFE produced 68% less smoke vs. uncoated stainless steel blades<sup>2</sup>

## 3 ergonomic, non-slip grip positions

### “Trigger” grip method

Eliminated 100% of the torque off the back end of the pencil for improved surgeon ergonomics<sup>5</sup>



### “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





# 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)