

Megadyne™

# Everything you want. Plus less.

Efficiency and hemostasis **plus less thermal damage**<sup>1</sup>



## MEGADYNE ACE BLADE™ 700



Intelligently delivered by

**G**eometric  
**E**lectron  
**M**odulation  
(GEM) Technology

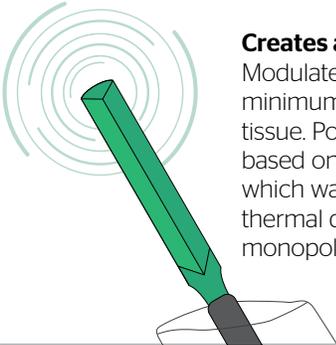
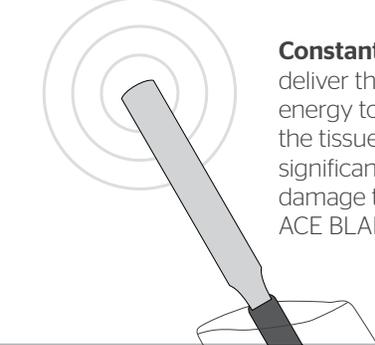
<sup>1</sup> In ACE Mode vs. standard monopolar electrosurgery: In a preclinical porcine model on abdominal wall dermis that measured thermal damage via histology (p<0.05). (075571-170630)

# Intelligently delivered by Geometric Electron Modulation (GEM) Technology

Introducing the MEGADYNE ACE BLADE™ 700 Soft Tissue Dissector powered by patented Geometric Electron Modulation (GEM) Technology. This intelligent technology delivers the efficiency and hemostasis you want with significantly **less thermal damage**<sup>1</sup> than standard monopolar electrosurgery.

GEM Technology achieves a scalpel-like cutting effect<sup>2</sup> by creating a **low voltage plasma**. This technology optimizes the voltage for the blade geometry and modulates power based on tissue impedance. It focuses energy to the tapered edges of the MEGADYNE ACE BLADE 700 Dissector and delivers the minimum power required to cut the tissue.

Together, focused energy and modulated power deliver significantly **less thermal damage**.<sup>2</sup>

GEM Technology	Standard monopolar electrosurgery
 <p><b>Creates a low voltage plasma.</b> Modulates power to deliver the minimum energy required to cut tissue. Power delivered fluctuates based on tissue impedance, which was designed for less thermal damage vs. standard monopolar electrosurgery.<sup>2</sup></p>	 <p><b>Constant power</b> modes deliver the same amount of energy to tissue regardless of the tissue impedance, creating significantly more thermal damage than the MEGADYNE ACE BLADE™ 700 Dissector!<sup>1</sup></p>

## Experience less thermal damage<sup>1</sup> plus...



### + Less instrument exchange vs. scalpel

This multifunctional tool can be used for incision, coagulation and dissection, which may **increase surgical efficiency**

- Can eliminate the need for a surgical scalpel in the OR, **removing a risk for sharps injuries**<sup>3</sup>



### + Less surgical smoke

**99.6% less hazardous surgical smoke** compared to stainless steel monopolar electrosurgery<sup>4</sup>

- **97% reduction in toxic BaP**, a known carcinogen, and **75% reduction in phenanthrene**, a known irritant<sup>4</sup>
- May allow for better **surgical site visibility**<sup>5</sup>



### + Less tissue temperature increase

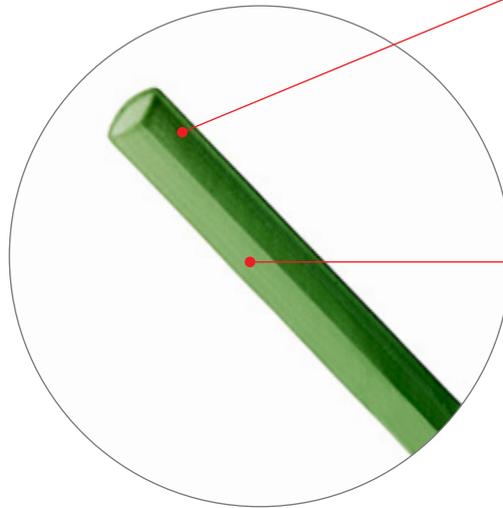
**84% less tissue temperature increase** versus stainless steel monopolar electrosurgery<sup>6</sup>

<sup>1</sup> In ACE Mode vs. standard monopolar electrosurgery: In a preclinical porcine model on abdominal wall dermis that measured thermal damage via histology (p<0.05). (075571-170630) <sup>2</sup> In ACE Mode vs. standard monopolar electrosurgery: Based on proprietary GEM Technology and preclinical porcine testing on abdominal wall dermis that measured thermal damage via histology (p<0.05). GEM Technology and test results are achieved when used on the MEGADYNE™ MEGA POWER™ Electrosurgical Generator in ACE Mode only. (083163-171027, 083164-171027, 083165-171027) <sup>3</sup> In a clinical study vs. cold steel scalpel that demonstrated noninferior wound healing/scar formation via the Patient Scar Assessment Scale (PSAS) (p<0.0001). Lee BJ, et al. Advanced Cutting Effect System versus Cold Steel Scalpel: Comparative Wound Healing and Scar Formation in Targeted Surgical Applications. *Plast Reconstr Surg Glob open*. 2014;2(10). (075570-170630) <sup>4</sup> In ACE Mode vs. standard monopolar electrosurgery: In a preclinical porcine model 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). (075563-170630) <sup>5</sup> In ACE Mode vs. standard monopolar electrosurgery: In a preclinical porcine model vs. uncoated stainless steel blades at 60W analyzed via spectrophotometer and HPLC UV (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). (075568-170630) <sup>6</sup> In ACE Mode: In a preclinical porcine model vs. uncoated stainless steel blades at 60W analyzed via infrared thermometer (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). (075560-170630)

# Intelligent energy. Intelligent performance.

## Cosmetic performance

The MEGADYNE ACE BLADE 700 Dissector in ACE Mode created skin incisions with no significant difference in cosmesis compared to a metal scalpel<sup>7</sup> and significantly better cosmesis compared to a standard electro-surgical blade.<sup>8</sup>



## Tapered cutting edges

The geometrically designed tapered blade edges help focus the energy.

## Reduced sticking

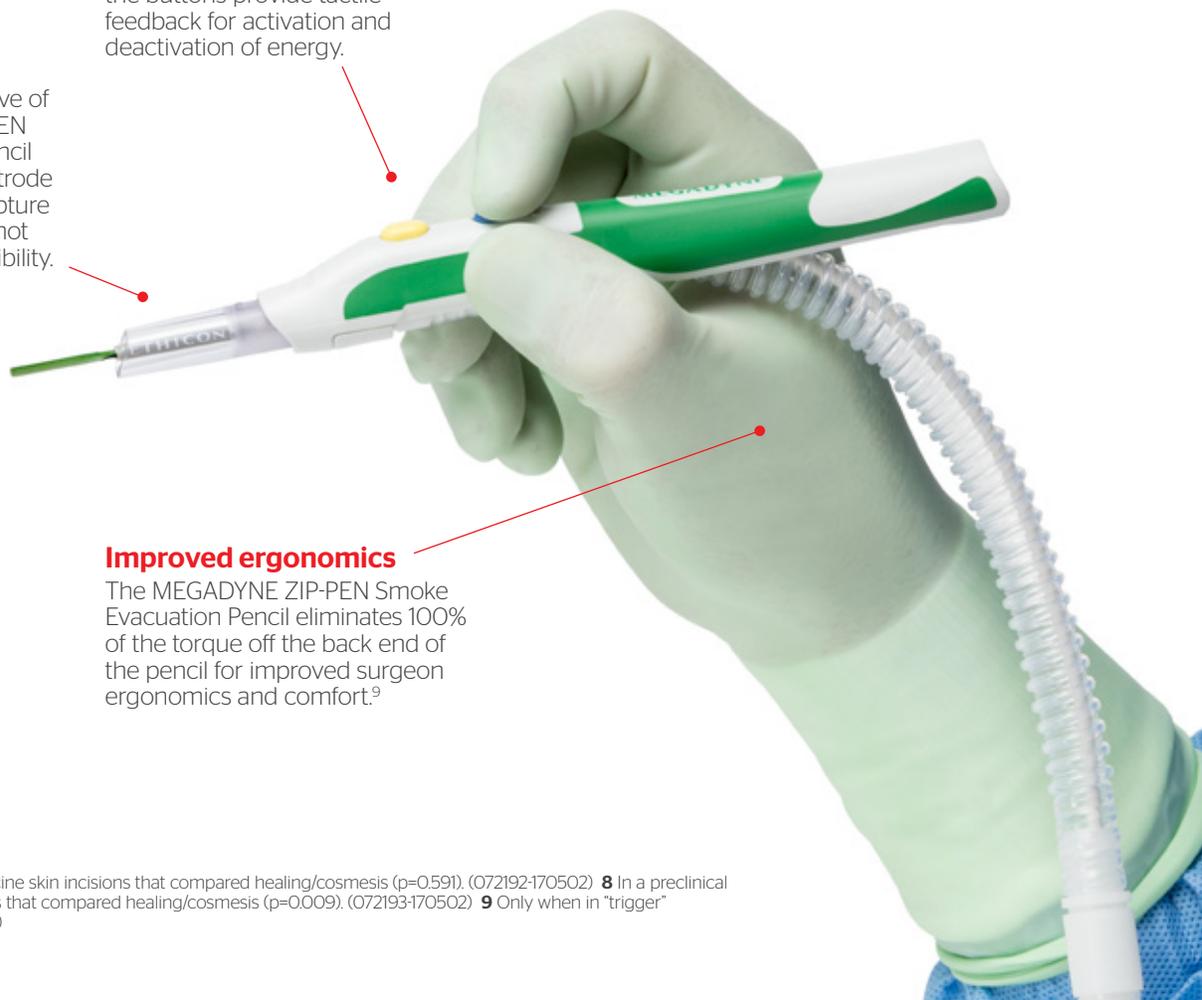
Features a proprietary green polytetrafluoroethylene (PTFE) coating that is designed to reduce eschar buildup during surgical procedures.

## Efficient smoke capture

The clear suction sleeve of the MEGADYNE ZIP-PEN Smoke Evacuation Pencil encapsulates the electrode for efficient smoke capture and was designed to not inhibit surgical site visibility.

## Easy energy control

The MEGADYNE™ ZIP-PEN™ Smoke Evacuation Pencil features large activation buttons designed for ease of use. When pressed, the buttons provide tactile feedback for activation and deactivation of energy.



## Improved ergonomics

The MEGADYNE ZIP-PEN Smoke Evacuation Pencil eliminates 100% of the torque off the back end of the pencil for improved surgeon ergonomics and comfort.<sup>9</sup>

<sup>7</sup> In a preclinical study of porcine skin incisions that compared healing/cosmesis (p=0.591). (072192-170502) <sup>8</sup> In a preclinical study of porcine skin incisions that compared healing/cosmesis (p=0.009). (072193-170502) <sup>9</sup> Only when in "trigger" configuration. (075019-170621)

# Ordering information

The MEGADYNE ACE BLADE 700 Dissector is available in two blade types, and all blades come pre-installed in the MEGADYNE ZIP-PEN Smoke Evacuation Pencil.

The MEGADYNE™ MEGA POWER™ Electrosurgical Generator is required to obtain the proven scalpel-like<sup>2</sup> benefits of the MEGADYNE ACE BLADE 700. Ethicon recommends the use of the MEGADYNE™ Mega Vac PLUS Smoke Evacuator and accessories for maximum smoke evacuation.<sup>10</sup>

## MEGADYNE ACE BLADE™ 700 Soft Tissue Dissector

CODE	BLADE LENGTH	BLADE TYPE		SMOKE EVACUATION PENCIL	CONNECTOR TYPE	QUANTITY PER SALES UNIT
ME7251C	2.5 inches	Standard		ZIP-PEN	C	6
ME7251E	2.5 inches	Standard		ZIP-PEN	E	6
ME725MIC	2.5 inches	Modified		ZIP-PEN	C	6
ME725MIE	2.5 inches	Modified		ZIP-PEN	E	6

## Connector compatibility guide

C CONNECTOR (STANDARD)	E CONNECTOR (EC)
MEGADYNE™ Mega Vac Smoke Evacuator	MEGADYNE™ MINI VAC™ Smoke Evacuator
MEGADYNE™ Mega Vac PLUS Smoke Evacuator	Buffalo Filter ViroVac®
MEGADYNE™ MINI VAC™ Smoke Evacuator (MGVSFT10 Fluid Trap with use of 2151 22mm Adapter only)	Buffalo Filter VisiClear®
ConMed AER DEFENSE™	Erbe IES
Buffalo Filter ViroVac®	LiNA SafeAir®
Buffalo Filter VisiClear®	Medtronic RapidVac™ (compatible with use of MGVSFT10 Fluid Trap only)
	Stryker Neptune® (compatible with use of MGVSFT10 Fluid Trap only)

For more information, visit: [ethicon.com/MegadyneAceBlade700](https://ethicon.com/MegadyneAceBlade700)

### 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)—EDI Helpline: 1-800-262-2888

Or, to place a non-electric (manual) order, contact Johnson & Johnson Health Care Systems Inc. at 1-800-255-2500 between 8:30am - 6:30pm (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.

<sup>2</sup> In ACE Mode vs. standard monopolar electrosurgery: Based on proprietary GEM Technology and preclinical porcine testing on abdominal wall dermis that measured thermal damage via histology (p<0.05). GEM Technology and test results are achieved when used on the MEGADYNE™ MEGA POWER™ Electrosurgical Generator in ACE Mode only. (083163-171027, 083164-171027, 083165-171027) <sup>10</sup> Per Instructions for Use. (075006-170621)