

Partner with the **leader in smoke management**— offering the largest portfolio of surgical smoke management products on the market.

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WHY CONMED?

# THERE ARE DANGERS IN SURGICAL SMOKE PLUME

# TOGETHER, WE CAN HELP ELIMINATE THEM.

What is surgical smoke? Surgical smoke is dangerous, vaporized combusted by-product that forms when energy source is applied to tissues, fluids or blood<sup>1</sup>. Research has shown that on average smoke produced daily was equivalent to 27-30 cigarettes<sup>2</sup>.

Additionally, half a million healthcare workers are exposed to surgical smoke every year<sup>3</sup>. The most obvious population exposed are O.R. staff. O.R. nurses, in particular, report twice the number of respiratory illness compared to the general public<sup>4</sup>.



FEBRUARY 25, 1990

## SMOKING BANNED ON U.S. FLIGHTS<sup>5</sup>

Health protections are in place today to protect the public from harmful cigarette smoke — why are we not protecting O.R. staff from surgical smoke?

<sup>1</sup>ConMed. (2022). Clear The Air®: The Time is Now. [PowerPoint slides]. URL <sup>2</sup>Hill, D.S. et. Al., Surgical Smoke- A health hazard in the operating theatre. A study to quantify exposure and a survey of smoke extractor systems in UK plastic surgery units. Journal of Plastic, Reconstructive, and Aesthetic Surgery 2012. <sup>3</sup>Barrett, W., Garber, S. (2004). Surgical Smoke — A Review of the Literature. Business Briefing, Global Surgery

<sup>4</sup>Ball, K., (2010). Compliance With Surgical Smoke Evacuation Guidelines: Implications for Practice. AORN Journal. doi: 10.1016/j.aorn.2010.06.002 <sup>5</sup>American Nonsmokers' Rights Foundation. (2015). Celebrating 25 Years of Smokefree Skies. https://no-smoke.org/celebrating-25-years-smokefree-skies/ <sup>6</sup>ConMed. (2022). Clear The Air®: The Time is Now. [PowerPoint slides]. URL <sup>7</sup> ConMed. (2022). Every Breath Matters. [Video]. URL



PERIOPERATIVE NURSE, ATLANTA, GA

In February of 2020, Angela was diagnosed with stage 4 non-small cell lung cancer after 40 years as an O.R. nurse<sup>6</sup>.

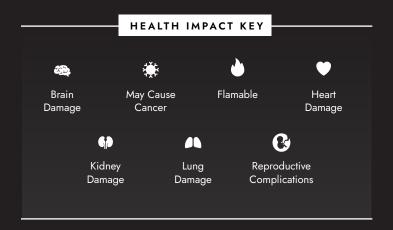
I would wear my mask everyday not to protect myself from smoke per say but to protect the patient...there was nothing protecting me<sup>7</sup>.

WHY CONMED? 0 6

# 150 TOXIC CHEMICALS

# ARE FOUND IN SURGICAL SMOKE

There are over 150 chemicals in surgical smoke<sup>8</sup>. Over a third of these are toxic, mutagenic and/or carcinogenic chemicals<sup>9</sup>. These chemicals are formed when energy is applied to tissue, protein and fat. Chemicals are found in surgical smoke because when an energy source is applied to tissues, it breaks down the molecular bonds.

























**FORMALDEHYDE** 







**ETHYLBENZENE** 





















Pierce JS, Lacey SE, Lippert JF, Lopez R, Franke JE. Laser-generated air contaminants from medical laser applications: a state-of-thescience review of exposure characterization, health effects, and control. J OccupEnviron Hyg.2011;8(7):447-466 <sup>9</sup>Ulmer BC. The hazards of surgical smoke. AORN J. 2008 Apr;87(4):721-34; quiz 735-8. doi:10.1016/j.aorn.2007.10.012. PMID: 18461735



# **VISICLEAR®**

Combining variable filter life (up to 35 hours depending on procedure\*), automatic filter life tracking, an occlusion alarm and one touch programmable procedure modes. VisiClear® effectively filters surgical smoke, particulates and other potentially hazardous

by-products providing a healthier environment for O.R. Staff. Designed with Whisper Technology™\* to ensure ultra-quiet operation, surpassing AORN Guidelines.\*\*



<sup>\*\*</sup> AORN Guidelines: AORN. 2021. Guidelines for Perioperative Practice: Surgical Smoke Safety.





# $\overline{\mathbb{Q}}$ DID

# **DID YOU KNOW?**

Smoke evacuators have shown to **decrease** exposure of particles by

**88**%'

# VISICLEAR® SURGICAL SMOKE EVACUATOR



# + Procedure Operating Modes

One of three operating modes (Laparoscopic, Open Tubing, and Electrosurgical Pencil Mode) can easily be selected, automatically customizing filter life based on surgical procedure.

### + Advanced Sound Control Design

Whisper Technology™ ensures ultra-quiet operation with unprecedented sound quality that exceeds AORN's guidelines for noise level.\*

#### + Sleek Shelf Design

Ergonomically designed to accommodate stacking.

# + Occlusion Warning

Safety feature that alerts medical personnel when an occlusion has occurred.

#### + Intuitive Color Touch Screen

Can be operated with ease even with a gloved hand, and requires minimal training to operate.

## + Unique Sliding Port Closure

SafePort<sup>™</sup> Technology ensures reduced risk of staff coming in contact with a contaminated port.

<sup>10</sup>Karjalainen M, Kontunen A, Saari S, Rönkkö T, Lekkala J, Roine A, Oksala N. The characterization of surgical smoke from various tissues and its implications for occupational safety. PLoS One. 2018 Apr 12;13(4):e0195274. doi: 10.1371/journal.pone.0195274. PMID: 29649244; PMCID: PMC5896939

<sup>\*</sup> AORN Guidelines: AORN. 2021. Guidelines for Perioperative Practice: Surgical Smoke Safety.



Description	Qty/Case	Catalog Number
VISICLEAR®		
100/120 Volt System with one filter	1	VC120
200/240 Volt System with one filter	1	VC220
100/120 Volt System without a filter	1	VC120NF

# **VIROVAC®**

ViroVac® Surgical Smoke Evacuator is compact, but no less capable, to meet all your physician office and outpatient center needs.

The versatile, patented 3-Port filter design features covered, hidden male ports and accommodates a variety of tubing sizes. Variable filter life (up to 35 hours\*) delivers value and reduces costs per

automatically tracks and records filter life. EZLink®, an automatic activation device, on and off, saving filter life. ViroSafe® Fluid Trap is designed to capture fluids to help maintain the integrity of the filtration system and assist with maintaining filter life.



# + Compact Design

Allows for easy placement on shelf or counter and accommodates stackability.

# + Filter Tracking Technology

Automatically tracks and records filter life through a patented technology.

# + Patented 3-Port Filter Design

Versatile 3-port filter design features covered, hidden male ports and accommodates a variety of tubing sizes providing versatility in procedure and accessory setup.

# + Variable Filter Life (up to 35 hours)

Delivers unsurpassed value and reduces per procedure costs.\*

procedure. Filter tracking technology can be used to remotely turn the evacuator

Description	Qty/Case	Catalog Number
VIROVAC®		
100/120 Volt Systems, including one filter and one footswitch	1	VV120
200/240 Volt Systems, including one filter and one footswitch	1	VV220
200/240 Volt Systems, without a filter	1	VV220NF



# PLUMESAFE® TURBO

PlumeSafe® Turbo is a powerful portable surgical smoke evacuator designed with sufficient flow for the aesthetic market. It features turbo suction power, an interactive LCD display and filter tracking technology. It can easily be placed on a counter, shelf, floor or other location convenient to the operative area.



# PORTA PLUMESAFE® 604

Porta PlumeSafe® 604 is an ideal surgical smoke evacuator for veterinarian and non-acute care settings where moderate flow is needed. The unit is portable, easy to use, and features patented technology to track filter life.



## ORDERING INFORMATION

Description	Qty/Case	Catalog Number
PLUMESAFE® TURBO		
100/120 Volt 50/60 Hz	1	PSWTURBO_AS
220/240 Volt 50/60 Hz	1	PSWTURBO_AS220

Description	Qty/Case	Catalog Number
PORTA PLUMESAFE® 604		
100/120 Volt 50/60 Hz	1	PPS604



# **VIROSAFE® FILTERS**

ViroSafe® filters have four stage filtration, enabling you to breathe cleaner air in your O.R. ULPA filtration is designed to remove 99.999% of the 0.1 - 0.2  $\mu m$  particulate in surgical smoke and the activated carbon is designed to adsorb hazardous gases. Filter Tracking Technology automatically tracks and records filter life through a patented technology.

## **VISICLEAR® FILTER**

Designed to fit VisiClear® smoke evacuator SafePort™ Technology prevents the clinician from accidental touching an exposed port when not in use. Customized filter life for acute care applications.



# + 4 Stage Filter

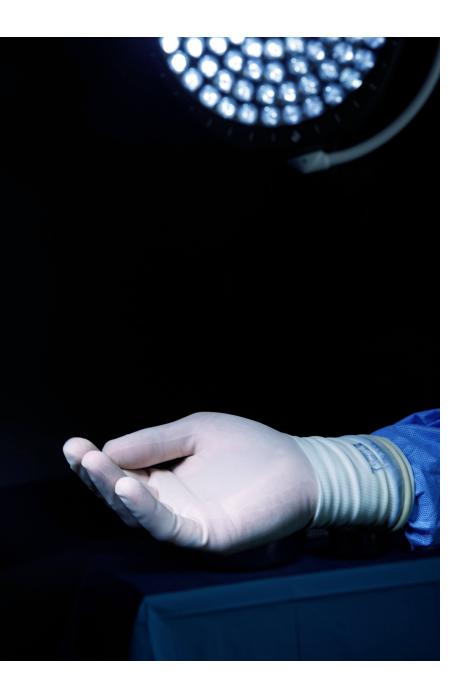
Gross particulate, ULPA media, activated carbon, and post filter designed to capture 0.1-0.2 micron particles at 99.999%\*

+ Up to 35 Hours of Smoke Evacuation Time

## + 3-Port Filter

7/8" (22 mm), 3/8" (9.5 mm) and 1/4" (6.4 mm).

<sup>\*</sup> Data on file.



Description	Qty/Case	Catalog Number
VIROSAFE® VISICLEAR® FILTERS		
3-port filter — 7/8 in (22 mm), 3/8 in (9.5 mm) and 1/4 in (6.4 mm)	1	VS135
3-port filter — 7/8 in (22 mm), 3/8 in (9.5 mm) and 1/4 in (6.4 mm)	2	VS1352
3-port filter — 7/8 in (22 mm), 3/8 in (9.5 mm) and 1/4 in (6.4 mm)	4	VS1354







# CASE STUDY

62-year-old gynecologist consulted otolaryngologist for a foreign body sensation in his throat for many weeks. Biopsy of the base of tongue revealed squamous cell carcinoma; positive for HPV 16<sup>11</sup>

<sup>11</sup>Rioux et.Al. HPV positive tonsillar cancer in two laser surgeons: case reports Journal of Otolaryngology - Head and Neck Surgery 2013, 42:54 http://www.journalotohns.com/content/42/1/54

# VIROVAC® FILTER

Designed to fit ViroVac® smoke evacuator.



# + 4 Stage Filter

Gross particulate, ULPA media, activated carbon, and post filter designed to capture 0.1-0.2 micron particles at 99.999%.\*

# + Up to 35 Hours of Smoke Evacuation Time

#### + 3-Port Filter

7/8" (22 mm), 3/8" (9.5 mm) and 1/4" (6.4 mm).

\* Data on file.

#### + Hidden Ports

Reduce the risk of cross contamination to caregivers.

Description	Qty/Case	Catalog Number
VIROSAFE® VIROVAC® FILTERS		
3-port filter — 7/8 in (22 mm), 3/8 in (9.5 mm) and 1/4 in (6.4 mm)	1	VS353
3-port filter — 7/8 in (22 mm), 3/8 in (9.5 mm) and 1/4 in (6.4 mm)	2	V\$35302
3-port filter — 7/8 in (22 mm), 3/8 in (9.5 mm) and 1/4 in (6.4 mm)	4	VS35304





Surgical smoke contains over **80** chemicals that have the same level of mutegenicity as **27-30** cigarettes.<sup>12</sup>

<sup>12</sup>Hill, D.S. et. Al., Surgical Smoke- A health hazard in the operating theatre. A study to quantify exposure and a survey of smoke extractor systems in UK plastic surgery units. Journal of Plastic, Reconstructive, and Aesthetic Surgery 2012. doi:10.1016/j. bjps.2012.02.012





# PLUMESAFE® TURBO AND PORTA PLUMESAFE® 604 FILTERS

Designed to fit PlumeSafe® Turbo and Porta PlumeSafe® 604.

# + 4 Stage Filter

Gross particulate, ULPA media, activated carbon, and post filter designed to capture 0.1-0.2 micron particles at 99.999%.\*

\* Data on file.

Description	Qty/Case	Catalog Number	Description	Qty/Case	Catalog Number
VIROSAFE® 6 FILTER			VIROSAFE® EXTRA LONG LIFE TWIN PORT FILTER		
Dual male ports — 7/8 in (22 mm) and 1–1/4 in (32 mm)	1	VS06001	Dual male ports — 7/8 in (22 mm) and 1–1/4 in (32 mm)	2	VSXLLT02
Dual male ports $-$ 7/8 in (22 mm) and 1 $-$ 1/4 in (32 mm)	2	VS06002	2 Dual male ports $-$ 7/8 in (22 mm) and 1–1/4 in (32 mm)	4	VSXLLT04
Dual male ports $-$ 7/8 in (22 mm) and 1 $-$ 1/4 in (32 mm)	4	V\$06004	VIROSAFE® VETERINARY FILTER		
VIROSAFE® EXTRA LONG LIFE FILTER			Dual male ports — 7/8 in (22 mm) and 1–1/4 in (32 mm)	1	VSVET01
Dual male ports $-$ 7/8 in (22 mm) and 1 $-$ 1/4 in (32 mm)	1	SING_VSXLL	VIROSAFE® ODOR / HAIR REMOVAL FILTER		
Dual male ports — 7/8 in (22 mm) and 1–1/4 in (32 mm)	2	VSXLL02			
Dual male ports — 7/8 in (22 mm) and 1–1/4 in (32 mm)	4	VSXLL04	Dual male ports — 7/8 in (22 mm) and 1–1/4 in (32 mm)	1	VSOH001
	4	V GALLO4	Dual male ports $-7/8$ in (22 mm) and $1-1/4$ in (32 mm)	2	VSOH002

# WALL AND PORTABLE SUCTION SYSTEMS

# 73% OF O.R. NURSES REPORT SYMPTOMS FROM SURGICAL SMOKE EXPOSURE:

Shortness of Breath (SOB) Nasal or Vocal Cord Polyp(s)

Increased Coughing Bronchitis

Nose Bleeds, Nasal Congestion Leukemia<sup>13</sup>

<sup>13</sup>Association of Occupational Exposure to Inhaled Agents in Operating Rooms With Incidenceof Chronic Obstructive Pulmonary Disease Among US FemaleNurses WubinXie,DrPH;OrianneDumas,PhD;RaphaëlleVarraso,PhD;KrislynM. Boggs,MPH;CarlosA.CamargoJr,MD,DrPH;AndrewC.Stokes,PhD

#### **IN-LINE FILTERS**

Designed to capture particulate before it enters wall suction systems.



+ ULPA-Rated Media

Designed to filter 0.1-0.2 micron particles at 99.999% efficiency.

+ Clear Housing Allows for Visualization of Filter Life

+ Economical

+ Designed for Ease of Use



Description	Qty/Case	Catalog Number
MULTI-USE IN-LINE FILTER		
Ideal for connection to wall suction port	10	BILF150
MULTI-USE IN-LINE FILTER		
Ideal for connection to wall canister tree 3/8" (9.5 mm) detached tube to single 1/4" (6.4 mm)	10	BILF200

# COMPETITIVE REPLACEMENT FILTERS

We offer a variety of filters for non-CONMED surgical smoke evacuators.



# **SMOKE MOVES FAST**

**40mph** is the rate of speed that smoke particles can travel and be evenly distributed throughout the O.R.<sup>14</sup>

<sup>14</sup>Nicola JH, Nicola EM, Vieira R, Braile DM, Tanabe MM, Baldin DH. Speed of particles ejected from animal skin by CO2 laser pulses, measured by laser Doppler velocimetry. Phys Med Biol. 2002;47(5):847-856

# SMOKE EVACUATOR FILTER FOR STRYKER® NEPTUNE 2 AND NEPTUNE 3

Designed to fit Stryker® Neptune 2 and Stryker® Neptune 3.



#### + 3-Port Filter

7/8" (22 mm), 3/8" (9.5 mm) and 1/4" (6.4 mm)

# STRYKEVAC 1 & 2 VIROSAFE® FILTER

Designed to fit Integrated StrykeVac Smoke Evacuation System.



## + 4-Port Filter

1-1/4" (32 mm), 7/8" (22 mm), 3/8" (9.5 mm) and 1/4" (6.4 mm)

# STRYKEVAC 3 VIROSAFE® FILTER

Designed to fit StrykeVac 3 Smoke Evacuation System Lasts up to 24 hours of smoke evacuation time.



2 4

## + 3-Port Filter

7/8" (22 mm), 3/8" (9.5 mm) and 1/4" (6.4 mm)



# BERCHTOLD® TELEVAC & TELEVAC LT

Replaces Berchtold® TELEVAC LT and Surgimedics.

+ 7/8" (22 mm) Port



# BERCHTOLD® PHOENIX XS OR X3 FILTER

Replaces Berchtold® TELEVAC XS/X3.

+ 7/8" (22 mm) Port



# TRUMPF® VIROSAFE® FILTER (EASYVAC FILTER FOR TRUMPF® EASYVAC)

Designed to fit TRUMPF® EasyVac.

+ 3-Port Filter

7/8" (22 mm), 3/8" (9.5 mm) and 1/4" (6.4 mm)

Description	Qty/Case	Catalog Number
STRYKER®		
Neptune 2 and Neptune 3, 3-port filter – 3/8" (9.5 mm), 1/4" (6.4 mm)	1	VSNEP01
Neptune 2 and Neptune 3, 3-port filter – 3/8" (9.5 mm), 1/4" (6.4 mm)	2	VSNEP04
StrykeVac 1 & 2, 4-port filter — 1-1/4" (32 mm), 7/8" (22 mm), 3/8" (9.5 mm) and 1/4" (6.4 mm)	20	VSSV505
StrykeVac 1 & 2, 4-port filter — 1/4" (6.4 mm), 3/8" (9.5 mm), 7/8" (22 mm) and 1-1/4" (32 mm)	20	VSSV50502
StrykeVac 3, 3-port filter – 7/8" (22 mm), 3/8" (9.5 mm) and 1/4" (6.4 mm)	1	VSSV301
StrykeVac 3, 3-port filter – 7/8" (22 mm), 3/8" (9.5 mm) and 1/4" (6.4 mm)	2	VSSV302
StrykeVac 3, 3-port filter – 7/8" (22 mm), 3/8" (9.5 mm) and 1/4" (6.4 mm)	4	VSSV304

Description	Qty/Case	Catalog Number
BERCHTOLD®		
TeleVac & TeleVac LT, 7/8" (22 mm) port	4	BTLD004
Phoenix XS or X3, 7/8" (22 mm) port	4	BTLDXSO4
TRUMPF®		
EasyVac, 3-port filter — 7/8" (22 mm), 3/8" (9.5 mm) and 1/4" (6.4 mm)	1	VSTR08
EasyVac, 3-port filter – 7/8" (22 mm), 3/8" (9.5 mm) and 1/4" (6.4 mm)	4	VSTRO804



# **PLUMEPEN®**

CONMED offers the most extensive portfolio of smoke evacuation pencils, with our PlumePen® line being the most clinically diverse offering on the market.



PLASTIC SURGEON, SAN DIEGO, CA

I went from being someone who basically coughed all day and night to a 95%

improvement of my symptoms when I started using smoke evacuation.<sup>15</sup>

# PLUMEPEN® ELITE SMOKE EVACUATION PENCIL

An ultra-slim, ergonomic design that offers the comfort and advanced features surgeons demand.



# + Powerfully Compact and Ultra Slim

Significantly smaller (up to 46%\*) than other electrosurgical smoke pencils and similar in size to standard electrosurgical pencils.

#### + Over-molded Cradle Design

Designed for improved grip and comfort.

#### + Full Blade Reveal

Offers exceptional visibility at the surgical site.

#### + Up to 25% More Flow\*

## + Light, Flexible Tubing

Aids in reducing pull, hand fatigue, and tension on the wrist.

#### \* Data on file.

# + Adjustable Capture Port

Offers customized placement for effective smoke plume capture regardless of blade length.

#### + Over-molded Button Design

One piece over-molded button designed to limit fluid ingress aiding in the prevention of sticking buttons.

# + 360 Degree Swivel

Allows for fluid hand movement and free range of motion.

<sup>15</sup>CONMED. (2022). Dr. Mofid Interview. [Video]. URL

# PLUMEPEN® ULTRA SMOKE EVACUATION PENCIL

Featuring a telescopic capture port and advanced swivel design for unrestricted hand movement.



Blade moves in unison with capture port affording versatility in any surgical situation. Integrated design eliminates need for blade replacement saving time and money.

#### + Multi-Directional Swivel

Unique, responsive, floating ball joint design allows unrestricted hand movement.

#### + Cam Lock System

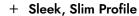
Have confidence in your blade staying in place with our advanced Cam Locking System, out to 6 inches.

## + Integrated Wire/Tubing Management

Ultra-light, flexible tubing designed to reduce wrist pull and hand fatigue.

# PLUMEPEN® PRO SMOKE EVACUATION PENCIL

A cost-effective, quality solution combining surgical smoke management with electrosurgery.



Smaller than most competitive surgical smoke evacuation pencils; similar in size to standard ESU pencils.\*

## + 360 Degree Swivel

Allows for fluid hand movement.

# + Compatible with Standard Electrodes

Designed for surgeries where longer electrodes are desired.

# + Removable Smoke Capture Port

Allows for easy electrode and capture port replacement.

#### + Textured Profile

Designed for improved surgeon's grip.

<sup>\*</sup> Data on file.

# ORDERING INFORMATION

Description	Qty/Case	Catalog Number
PLUMEPEN® ELITE		
10 ft (3 m) tubing, Stainless Steel ESU Blade	20	PLP1020
10 ft (3 m) tubing, Non-Stick ESU Blade	20	PLP2020
15 ft (4.6 m) tubing, Non-Stick ESU Blade	20	PLP2520
PLUMEPEN® ULTRA		
10 ft (3 m) tubing, Non-Stick ESU Blade	20	PLPUL2020
15 ft (4.6 m) tubing, Non-Stick ESU Blade	20	PLPUL2520
PLUMEPEN® PRO		
10 ft (3 m) tubing, Non-Stick ESU Blade	20	PLPRO4020
15 ft (4.6 m) tubing, Non-Stick ESU Blade	20	PLPRO4520

Description	Qty/Case	Catalog Number	
PLUMEPEN® PRO CAPTURE PORTS (X-RAY DETECT	ABLE)		
Accommodates 4" (102 mm) electrodes	20	PROTIP420	
Accommodates 5" (127 mm) electrodes	20	PROTIP520	
Accommodates 6" (152 mm) electrodes	20	PROTIP620	



# CASE STUDY

53-year-old gynecologist with human papillomavirus (HPV) 16 positive tonsillar squamous cell carcinoma. Only risk factor was occupational exposure to surgical plume from more than 3,000 cases.<sup>16</sup>

<sup>16</sup>Rioux et.Al. HPV positive tonsillar cancer in two laser surgeons: case reports Journal of Otolaryngology - Head and Neck Surgery 2013, 42:54 http://www.journalotohns.com/content/42/1/54

# GOLDVAC® SMOKE EVACUATION PENCIL

Designed to capture smoke at the surgical site, where accessibility and visibility are essential.



Position the 6 in extendable capture port anywhere along the active electrode for effective smoke capture.

#### + Extended Electrodes

Extended and insulated UltraClean® silicone coated electrodes available.

# + 360° Range of Motion

GoldVac® smoke evacuation tubing swivels 360° to eliminate wrist drag, and enable maximum maneuverability.

# + Multiple Button Configurations

Available in Push Button, Rocker Switch, and Foot Control configurations.

# GOLDVAC® SLIM SMOKE EVACUATION PENCIL

Help keep the O.R. safe from the hazards of surgical smoke with pencils designed for surgeons with smoke evacuation capabilities.

# + Slim, Low Profile

GoldVac® Slim pencils offer an ergonomic design — allowing for a surgical experience and technique that's similar to that of a standard pencil.

# + 360° Range of Motion

GoldVac<sup>®</sup> Slim smoke evacuation tubing swivels 360° to eliminate wrist drag, and enable maximum maneuverability.

# + Enhanced Visibility

Tapered lumen allows for unobstructed visualization of the target tissue.

Description	Qty/Case	Catalog Number	
GOLDVAC®			
Push Button, 1" UltraClean® Blade Electrode, 10 ft Tubing, Disposable	10	60-7510-005	
Rocker Switch, 1" UltraClean® Blade Electrode, 10 ft Tubing, Disposable	10	60-7520-005	
Foot Control, 1" UltraClean® Blade Electrode, 10 ft Tubing, Disposable	10	60-7530-005	
Push Button, 1" UltraClean® Blade Electrode, 15 ft Tubing, Disposable	10	60-7570-005	
Rocker Switch, 1" UltraClean® Blade Electrode, 15 ft Tubing, Disposable	10	60-7580-005	
GOLDVAC® SLIM PENCIL			
Push Button, 1" UltraClean® Blade Electrode, 10 ft of 9.5 mm tubing, Disposable	20	60-7610-001	
Push Button, 1" UltraClean® Blade Electrode, 15 ft of 9.5 mm tubing, Disposable	20	60-7670-001	

Description	Qty/Case	Catalog Number	
GOLDVAC® ULTRACLEAN® ELECTRODES			
4" GoldVac® UltraClean® Blade	25	60-7524-001	
6" GoldVac® UltraClean® Blade	25	60-7526-001	
1" GoldVac® UltraClean® Blade w/ Extended Insulation	25	60-7521-001	
4" GoldVac® UltraClean® Blade w/ Extended Insulation	25	60-7522-001	
6" GoldVac® UltraClean® Blade w/ Extended Insulation	25	60-7523-001	

# **SNAPEVAC**<sup>TM</sup>

SnapEvac™ is an ergonomically designed smoke evacuation electrosurgical pencil adapter that transforms most electrosurgical pencils into surgical smoke evacuation device that captures smoke plume at the point of creation. Just snap in the handpiece of your choice! A transparent capture port improves visibility of the surgical site. It eliminates the need for O.R. personnel to hold tubing, and is a cost-effective option for surgical smoke evacuation.

# SNAPEVAC™ SURGICAL SMOKE EVACUATION ADAPTER



## + Efficient Workflow

Eliminates need for O.R. personnel to hold tubing.

# + Transparent Capture Port

Improves visibility of the surgical site.

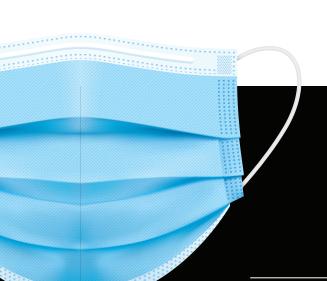
# + Cost-Effective

Economical option for surgical smoke evacuation.

# + Lightweight Tubing

# **PENADAPT®**

PenAdapt® is an ergonomically designed smoke evacuation adapter for most electrosurgical pencils that captures surgical smoke at the point of creation.



# MASKS DON'T WORK

Surgical masks, even if correctly fitted and frequently changed, can effectively filter only particles larger than *5 microns in size*<sup>17</sup>

<sup>17</sup>Mowbray N, Ansell J, Warren N, Wall P, Torkington J. Is surgical smoke harmful to theater staff? a systematic review. Surg Endosc. 2013 Sep;27(9):3100-7. doi: 10.1007/s00464-013-2940-5. Epub 2013 Apr 19. PMID: 23605191.

# PENADAPT® SURGICAL SMOKE EVACUATION ADAPTER



Pliable silicone material allows for proper fit with most electrosurgical pencil brands.

# + Low Profile Front Nozzle

Improves visibility of the surgical site.

# + Angled Back End Clasp

Designed to reduce tension placed on surgeon's wrist providing comfort.

3 4

#### + Efficient Workflow

Eliminates need for O.R. personnel to hold tubing.

Description	Qty/Case	Catalog Number
SNAPEVAC™		
Designed using ABS plastic and polcarbonate capture port with 10 ft (3 m) tubing; 7/8" (22 mm) cuff	20	SNAPEVAC20
PENADAPT®		
Ideal for wall suction applications. Includes 3/8" (9.5 mm) x 1 ft (30.5 cm) tubing with a 3/8" (9.5 mm) connector	25	PA1025
Ideal for surgical smoke evacuator applications. Includes 3/8" (9.5 mm) x 4 ft (1.22 m) tubing with an adapter to 7/8" (22 mm) x 6 ft (1.8 m) tubing	10	PA2010
Ideal for attachment to reuseable electrosurgical pencil applications. Includes 3/8" (9.5 mm) x 4 ft (1.22 m) tubing with an adapter to 7/8" (22 mm) x 6 ft (1.8 m) tube	10	PA2010B

# **CLEARVAC®**

The ClearVac® Smoke Evacuation Pencil Attachment features a comfortable grip and lightweight tubing that takes the bulkiness out. It's a cost-effective solution to remove surgical smoke and comes prepackaged and sterile with GoldLine® rocker switch, push button, and foot control pencil configurations.

# DR. ANTHONY HEDLEY MD, FACS

ORTHOPEDIC SURGEON, PHOENIX, AZ

Just over 3 years ago, at age 70, I underwent a life-saving lung transplant, something I believe was a result of a danger that is lurking in O.R.s across the country: surgical smoke, one of the largest unaddressed health hazards facing operating room staff today<sup>18</sup>

**CLEARVAC® SMOKE EVACUATION** PENCIL ATTACHMENT

#### + Economical

Cost effective solution to remove surgical smoke.

#### + Efficient Workflow

Eliminates need for O.R. personnel to hold tubing.

## + Easy to Use

Comfortable grip, lightweight tubing and multiple configurations makes transition easier and meets your specific clinical needs.

3 6

PENCILS AND ADAPTERS

Description	Qty/Case	Catalog Number
CLEARVAC® ELECTROSURGICAL PENCIL SMOKE ATTACHMENT		
12 in of 10 mm Tubing and 5-in-1 Adapter, Single Use, Sterile	25	60-6827-001A
4 ft of 10 mm Tubing and 6 ft of 22 mm Tubing, Single Use, Sterile	10	60-6839-001A
GOLDLINE® PENCIL WITH CLEARVAC® ATTACHMENT		
Push Button Electrosurgical Pencil Smoke Attachment with 4 ft of 10 mm Tubing and 6 ft of 7/8" (22 mm) Tubing, Standard Blade Electrode, Holster, Single Use, Sterile	10	60-6828-001A
Rocker Switch Electrosurgical Pencil Smoke Attachment with 4 ft of 10 mm Tubing and 6 ft of 7/8" (22 mm) Tubing, Standard Blade Electrode, Holster, Single Use, Sterile	10	60-6829-001A
Push Button Electrosurgical Pencil Smoke Attachment with 4 ft of 10 mm Tubing and 6 ft of 7/8" (22 mm) Tubing, UltraClean® Blade Electrode, Holster, Single Use, Sterile	10	60-6828-005A
Rocker Switch Electrosurgical Pencil Smoke Attachment with 4 ft of 10 mm Tubing and 6 ft of 7/8" (22 mm) Tubing, UltraClean® Blade Electrode, Holster, Single Use, Sterile	10	60-6829-005A
Foot Control Electrosurgical Pencil Smoke Attachment with 4 ft of 10 mm Tubing and 6 ft of 7/8" (22 mm) Tubing, UltraClean® Blade Electrode, Holster, Single Use, Sterile	10	138663A



LAPAROSCOPIC SOLUTIONS

# **PLUMEPORT®**

Our extensive line of passive and active laparoscopic smoke management devices, each PlumePort® device provides a different clinical application to fit any need.

#### PLUMEPORT® ACTIV®

PlumePort® ActiV® is designed for safe, effective removal of surgical smoke during laparoscopic procedures, easily attaching to standard trocars and utilizing suction systems providing noiseless operation.



3 9

#### + Active Smoke Removal

Controlled management of smoke throughout the surgical procedure featuring flow control dial with one hand adjustability.

#### + Up to 50% More Flow

Provides greater flow than passive laparoscopic devices.

#### + Compact Housing Design

Contains built-in fluid trap, flow adjustment valve and filtration.

#### + Moisture Management

Built-in fluid trap to manage moisture throughout entire procedure.

#### + Integrated ULPA Filtration

Coupled with activated carbon to safely filter peritoneal smoke.

#### + Universal Connectivity

Easily attaches to standard luer lock fittings and suction systems.

#### + Noiseless Operation



#### **PLUMEPORT®**

PlumePort® is a passive laparoscopic smoke filtration device with integrated ULPA filtration coupled with activated carbon to safely filter smoke during laparoscopy.



#### + Improves Visibility

+ ULPA Filtration

Safely filters surgical smoke improving surgeon's visibility, while protecting staff and patients from airborne hazards.

Designed to filter  $0.1-0.2~\mu m$ 

particulate at 99.999% efficiency.

#### + Adjustment Flow Control

Lightweight design and integral control maintains peritoneal distention.

#### + Activated Carbon

Incorporates activated carbon known to adsorb gases.

#### + Moisture Management

With an integrated fluid trap and wicking materials, moisture is effectively managed to ensure the integrity of the filtration media.

## + Universal Connectivity

Easily connects to all standard luer lock fittings.

LAPAROSCOPIC SOLUTIONS

#### PLUMEPORT® SEO

With an embedded Flow Restrictor, PlumePort® SEO provides fast and safe smoke management while maintaining peritoneal distention.



#### + Universal Connectivity

Easily connects from a standard trocar to a smoke evacuator.

#### + Hands-Free Operation

No additional adjustments required after setup.

## PLUMEPORT® SEV

PlumePort® SEV puts the control of surgical smoke evacuation in your hands.



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#### + Universal Connectivity

Easily connects from a standard trocar to a smoke evacuator.

#### + Control Valve

Control when smoke evacuated from the sterile field via the integrated control valve.

LAPAROSCOPIC SOLUTIONS 42

Description	Qty/Case	Catalog Number
PLUMEPORT® ACTIV®		
Active laparoscopic smoke management device, 10 ft	10	PP010CS
PLUMEPORT®		
Passive laparoscopic smoke management device	10	PP010
PLUMEPORT® SEO		
Laparoscopic smoke management tubing, 10 ft	12	PP012SEO
PLUMEPORT® SEV		
Laparoscopic smoke management tubing, 10 ft	12	BLAP100V





# **TUBING**

CONMED offers a comprehensive portfolio of surgical smoke evacuation tubing and tubing reducers that can accommodate most clinical applications.

#### SAGES

**GUIDANCE ON SMOKE EVACUATION:** 



Currently, the best practice for mitigating possible infectious transmission during open, laparoscopic and endoscopic procedures is to use a multifaceted approach, which includes proper room filtration and ventilation, appropriate PPE, and *smoke evacuation devices with a suction and filtration system*, <sup>19</sup> as available."

<sup>19</sup>Dobrogowski, M., Wesolowski, W., Kucharska, M., Sapota, A., & Pomorski, L. S. (2014). Chemical Composition of Surgical Smoke Formed in The Abdominal Cavity During Laparoscopic Cholecystectomy — Assessment of the Risk to the Patient International Journal of Occupational Medicine and Environmental Health 2014;27(2):314 — 325 http://dx.doi.org/10.2478/s13382-014-0250-3

#### TUBING

Our tubing comes in a variety of lengths, diameters, and sterility choices.



+ Sterile and Non-Sterile Options

+ Specialty Application Tubing

+ Wide Diameter Range

1/4" to 1 - 3/8"

+ Variety of Lengths

Description	Qty/Case	Catalog Number
STERILE		
3/8" (9.5 mm) Diameter		
10 ft (3.0 m)	10	VT38S1010
7/8" (22 mm) Diameter		
6 ft (1.8 m)	24	VT10424
10 ft (3.0 m)	24	VT10624
6 ft (1.8 m) – Integral Wand and Sponge Guard	24	VTWT424
6 ft (1.8 m) — Hand-Held Tubing	5	60-6805-001
10 ft (3.0 m) – Integral Wand and Sponge Guard	24	VTWT624
10 ft (3.0 m) – Integral Wand and Sponge Guard with 7/8" to 1-3/8" adapter	10	VTWTS10
14 ft (4.3 m) – Integral Wand and Sponge Guard	5	VTWT805
1-1/4" (32 mm) Diameter		
6 ft (1.8 m)	6	VT10206
6 ft (1.8 m) – Integral Wand and Sponge Guard	6	VTWT206
1-3/8" (35 mm) Diameter		
6 ft (1.8 m) – Integral Wand and Sponge Guard	5	VTWT505
10 ft (3.0 m) – Integral Wand and Sponge Guard	5	VTWT515

Description	Qty/Case	Qty/Case Catalog Number	
STERILE SPECIALTY			
8 ft (2.4 m) Total Length $-$ 7/8" (22 mm) x 6 ft (1.8 m) tubing with reducer to 1/4" (6.4mm) x 2 ft (0.6 m) tubing	5	VTESU05	
10 ft (3.0 m) Total Length $-$ 7/8" (22 mm) x 6ft (1.8 m) tubing with reducer to 3/8" (9.5mm) x 4 ft (1.2 m) tubing	5	VTVIC10	
2 ft (0.6 m) $-$ 7/8" (22 mm) to 1/4" (6.4 mm) reducer fitting with 2 ft of 1/4 in tubing	10	RF10210	

Description	Qty/Case	Catalog Number	
NON-STERILE			
1/4" (6.4 mm) Diameter			
2 ft (0.6 m)	5	ST10105	
7/8" (22 mm) Diameter			
2.5 ft (0.7 m) — Replaces Suction Canister Connecting Tube	10	VT10610	
6 ft (1.8 m)	6	VT78-6	
6 ft (1.8 m) — Includes 12 Tubing-toTubing Connectors	24	VT10324	
6 ft (1.8 m) – Integral Wand and Sponge Guard	24	VTWT324	
10 ft (3.0 m)	10	VT10524-10	
10 ft (3.0 m)	24	VT10524	
10 ft (3.0 m) – Integral Wand and Sponge Guard	24	VTWT524	
1-1/4" (32 mm) Diameter			
2 ft (0.6 m)	10	VT10510	
6 ft (1.8 m)	6	VT10106	
10 ft (3.0 m)	6	VT10306	

Description	Qty/Case	se Catalog Number	
NON-STERILE SPECIALTY			
6 ft (1.8 m) – Includes Six 2 ft (0.6m) Length Lubes with Integral Wand and Sponge Guard	1	VTEYKIT	
8 ft (2.4 m) Total length $-$ 7/8" (22 mm) x 6ft (1.8 m) tubing with reducer to 1/4" (6.4mm) x 2 ft (0.6 m) tubing	5	PSFTS05	
2 ft (0.6 m) - 7/8" (22 mm) to 1/4" (6.4 mm) reducer fitting with 2 ft of 1/4 in tubing	10	RF10110	

#### **EZLINK®**

EZLink®, an automatic activation device, can be used to remotely turn all CONMED smoke evacuators on and off, maximizing filter life.



#### + Extended Activation

Adjustable run time allows for capture of residual smoke.

#### + Convenient Set-Up

Multiple cautery pencils can be accommodated with one EZLink® device.

## + Compatibility

Works on all CONMED smoke evacuation systems, and some competitive smoke evacuators.

#### + Remote Activation

Remotely turn smoke evacuator on and off in conjunction with an electrosurgical unit.

#### **DIRECT CONNECT CABLE**

Physically connects to your electrosurgical unit to automatically activate your CONMED smoke evacuator.



#### + Easy Set-Up

Requires no programming.

#### + ESU Compatibility

Compatible with certain CONMED and Covidien ESU models.

#### **VIROSAFE® FLUID TRAP**

Designed to capture fluids and particulate to help maintain the integrity of any ViroSafe® Filter.



#### + Capacity

Holds up to 100 cc of fluid with simple to read measurement increments.

#### + Intuitive Design

7/8", 3/8", and 1/4" connection ports and dedicated tabs to store caps during use.

#### Y ADAPTER

Plug two accessories into one filter port.



#### + Compatibility

Compatible with most, standard 22 mm smoke evacuation accessories.

## + Saves Space

Overcomes the need for additional capital.

Description	Qty/Case	Catalog Number
EZLINK®		
EZLink <sup>®</sup>	1	EZLINK01
VIROSAFE® FLUID TRAP		
7/8" (22 mm) and 1/4" (6.4 VSFT10 mm) tubing connection ports. Fits 7/8" (22 mm) port of Buffalo Filter ViroSafe® Filters	10	VSFT10
DIRECT CONNECT CABLE		
For CONMED Electrosurgical Units (certain models only) and Buffalo Filter Smoke Evacuators	1	DCCM01
For Covidien Electrosurgical Units (certain models only) and Buffalo Filter Smoke Evacuators	1	DCC0V01
Y ADAPTER		
22 mm connection to two 22 mm connectors	1	ADP22X22Y



# **OTHER ACCESSORIES**

Description	Qty/Case	Catalog Number	Description	Qty/Case	Catalog Number
PNEUMATIC FOOTSWITCH			ARMSTAND		
10 ft length	1	FS10004	710" (25.4 cm) x 10" (25.4 cm) x 34" (86.4 cm)	1	ARMSTAND
LASEADAPT® SC CONTOUR TRL HAND PIECE ADAPTER			EVACUCART™		
7/8" (22 mm) connector	10	LA3010EY10	15" (38.1 cm) x 17.5" (44.5 cm) x 32" (81.3 cm)	1	ETC01
LASEADAPT® PROFRACTIONAL THERAPY HAND PIECE ADAPTE	R		VIROVAC® WALL MOUNT KIT		
7/8" (22 mm) connector	10	LA3010PF10	Wall mount kit designed for ViroVac® surgical smoke evacuator	1	VVWM01
LASEADAPT® HAND PIECE ADAPTER CLIPS					
LaseAdapt® Reuseable Tubing Clips	4	LA3010CL4			

# THE CHOICE IS IN YOUR HANDS.



www.CONMED.com

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