

stryker

# Neptune<sup>®</sup> E-SEP<sup>™</sup>

The perfect  
balance of  
**precision and  
protection**



# Taking action for yourself and others

When there's surgical smoke in the operating room, the long-term effects can be unclear. What is known is that many substances within surgical smoke have been proven to be mutagenic and carcinogenic associated with a range of serious health issues including eye, skin and throat irritation,<sup>10</sup> carcinogenic exposure,<sup>12</sup> double the incidence of respiratory problems,<sup>13</sup> and tonsillar/oropharyngeal squamous cell carcinomas.<sup>11, 14-15</sup>

**75%** of surgeons and

**86%** of materials managers believe smoke evacuation will soon be regulated in the U.S.<sup>16</sup>



Surgical smoke affects everyone, even your non-scrubbed O.R. staff.<sup>5, 17</sup> Taking action today will help to protect you and your team tomorrow.

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**85%** of 24 million annual procedures involve electrosurgery, and the O.R. team spends the majority of their working days breathing its smoke.<sup>5</sup>

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**27-30** unfiltered cigarettes; the average daily impact of surgical smoke on the O.R. team.<sup>19</sup>

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**5** microns is the limit for effective filtering by standard surgical masks. Surgical smoke can contain viruses much smaller. (e.g., HIV = 0.15 microns, HPV = 0.055 microns, HepB = 0.042 microns).<sup>5</sup>

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**77%** of particles within surgical smoke are less than 1.1 microns in size; easily deposited in the alveoli and circulated throughout the body.<sup>1,5</sup>

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**16** All 16 U.S. EPA priority pollutant PAHs (polycyclic aromatic hydrocarbons) have been detected in surgical smoke.<sup>18</sup>

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**60K - 1million** O.R. particles multiply 17 times from 60,000 particles/cubic feet to more than 1 million particles/cubic feet within five minutes of ESU activation.<sup>20</sup>

# Neptune E-SEP Smoke Evacuation Pencil

## Feel the **difference**

“Ergonomically, it’s a winner!”

- Orthopaedic surgeon and participant in simulated surgical lab

Transparent, X-ray detectable suction sleeve provides “on-tip” smoke evacuation, to help capture smoke – and the potential hazards it carries<sup>1-3</sup> – directly at the source for optimal effectiveness.

Ribbing and knurling optimise grip and comfort.

Lightweight, natural feel. Just 14 grams – equivalent to a No. 2 pencil.

70mm blade electrode, coated or uncoated based on your preference.

Cut and coagulation functions have visual and tactile cues, enabling intuitive use by “feel.” Available in push button or rocker switch configuration.



ACTUAL SIZE

Components are not made with natural rubber latex.

Light, flexible tubing provides tangle-free cord management and range of motion.

### Protective in nature. Comfortable by design.

When it comes to surgical tools, you weighed in on the importance of comfort – and we listened. With a size, shape and weight that’s as natural to use as a standard pencil, we designed the Neptune E-SEP Smoke Evacuation Pencil with multiple ergonomic features to give you the freedom to operate as usual. Weighing only half an ounce, the E-SEP delivers the comfortable monopolar performance you need, all while providing the protection you want: smoke removal precisely at the source.

#### What else weighs approximately half an ounce?

Standard No. 2 pencil



Half a slice of bread



A household ice cube



Device <sup>4</sup>	Height	Width	Length	Weight	Weight
	Top to bottom just in front of “cut” button	Side to side	Tip of needle to end of pencil	Without tubing or wire	Without tubing or wire
<b>Neptune E-SEP</b>	<b>0.488 in</b>	<b>0.488 in</b>	<b>7.50 in</b>	<b>14 gm</b>	<b>0.49 oz</b>

### Performance

- Preserves surgeon’s natural technique via lightweight, ergonomic dimensions
- Eliminates need for nurse with smoke tube; freeing up space at the table and hands to assist
- Helps maintain a clear operative site

### Efficiency

- Integrates with existing monopolar electrosurgical generators, smoke evacuation systems (22mm inlet) like that in the Neptune 3 Waste Management System
- 2-in-1 clinical solution for seamless budget approval
- Helps fulfill guidelines and recommendations of governmental safety and clinical quality groups scrutinising surgical smoke hazards (e.g., AORN, Joint Commission, OSHA, NIOSH/CDC, ECRI, ANSI)<sup>5-9</sup>

### Safety/Satisfaction































- Helps reduce exposure to smoke-related biohazards<sup>10</sup>
- Helps to prevent potential absenteeism or workers’ comp issues that have been linked to smoke exposure<sup>11</sup>



## The right touch

To try the Neptune E-SEP Smoke Evacuation Pencil call **+61 2 9467 1000** or your Surgical sales representative. For more details visit [www.neptunewastemanagement.com/ESEP](http://www.neptunewastemanagement.com/ESEP)

## Neptune E-SEP Smoke Evacuation Pencil and accessories

Stryker P/N	Description	Length	Product image		
<b>Pencil</b>					
0703-046-000	Integrated smoke evacuation pencil Coated 70mm blade, push button switch	N/A			
0703-047-000	Integrated smoke evacuation pencil Coated 70mm blade, rocker switch	N/A			
0703-047-001	Integrated smoke evacuation pencil Non-coated, 70mm blade, rocker switch	N/A			
SHK-TSP-CL	Integrated telescopic smoke evacuation pencil Coated 70mm blade, push button switch	N/A			
<b>Suction sleeve</b>					
0703-005-125	Suction sleeve	125mm			
0703-005-165	Suction sleeve	165mm			
<b>Needle</b>					
0703-007-070	Needle electrode	70mm			
<b>Blade</b>					
0703-070-000	Blade electrode coated	70mm			
0703-070-001	Blade electrode	70mm			
0703-070-002	Blade electrode coated and insulated	70mm			
0703-125-000	Blade electrode coated	125mm			
0703-125-001	Blade electrode	125mm			
0703-125-002	Blade electrode coated and insulated	125mm			
0703-165-000	Blade electrode coated	165mm			
0703-165-001	Blade electrode	165mm			
0703-165-002	Blade electrode coated and insulated	165mm			
<b>Ball</b>					
0703-120-003	Ball electrode 3mm diameter	120mm			
0703-120-005	Ball electrode 5mm diameter	120mm			
<b>Loop and conization</b>					
		Width	Depth	Length	
0703-213-015	Conization electrode	13mm	15mm	120mm	
0703-213-020	Conization electrode	13mm	20mm	120mm	
0703-216-008	Conization electrode	16mm	8mm	120mm	
0703-216-018	Conization electrode	16mm	18mm	120mm	
0703-220-020	Conization electrode	20mm	20mm	120mm	
0703-310-010	Loop t-bar electrode	10mm	10mm	120mm	
0703-315-012	Loop t-bar electrode	15mm	12mm	120mm	
0703-320-015	Loop t-bar electrode	20mm	15mm	120mm	
0703-320-020	Loop t-bar electrode	20mm	20mm	120mm	
0703-620-015	Loop t-bar electrode	20mm	15mm	60mm	
0703-620-020	Loop t-bar electrode	20mm	20mm	60mm	
0703-720-020	Loop u-bar electrode	20mm	20mm	120mm	

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**For more information** about Neptune E-SEP Smoke Evacuation Pencil, please call your Surgical sales representative, Customer Service or visit **www.neptunewastemanagement.com/ESEP**