



Advanced Energy eXperience | INNOVATION IN CUTTING & COAGULATION

The need for innovation

Advanced Energy
eXperience

PEAK PlasmaBlade®

The Aquamantys® System

PEAK PlasmaBlade®
The proven value

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Innovating for life.



The need for innovation in electro surgery

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CONTROLLING BLEEDING

Blood loss can lead to impaired visibility of the surgical field and may imply a higher risk of injury to sensitive structures¹

Blood loss increases the risk of transfusions with related adverse outcomes, impacting length of hospital stay²



MINIMISING THERMAL TISSUE DAMAGE

The high temperatures used with standard electro surgery systems lead to thermal tissue damage, compromising wound strength, wound healing and the cosmetic appearance of scars^{3,4}



IMPROVING OPERATING ROOM EFFICIENCY

Exchanging devices for cutting and coagulation during surgery may lead to operating inefficiencies

Limited operating room space requires smarter set up of OR equipment



LIMITING EXPOSURE TO SURGICAL SMOKE

Smoke produced by electro surgical instruments contains hazardous components and exposure to these components may lead to potential long-term health hazards^{5,6,7}



REDUCING HOSPITAL INVENTORY

There is an increasing pressure on hospitals to reduce acquisition costs for capital equipment. Bundling technologies that can be used across surgical disciplines can contribute to resource efficiency



ONE energy solution that allows you to:

- Have **access** to the latest innovations in cutting and coagulation for optimal patient treatment
- **Improve** operating room efficiency by simultaneous use of cutting and coagulation devices
- **Limit** hospital inventory by offering 1 system for multidisciplinary use in the OR
- **Simplify** the set up & optimise ease of use
- Be exposed to **less** surgical smoke



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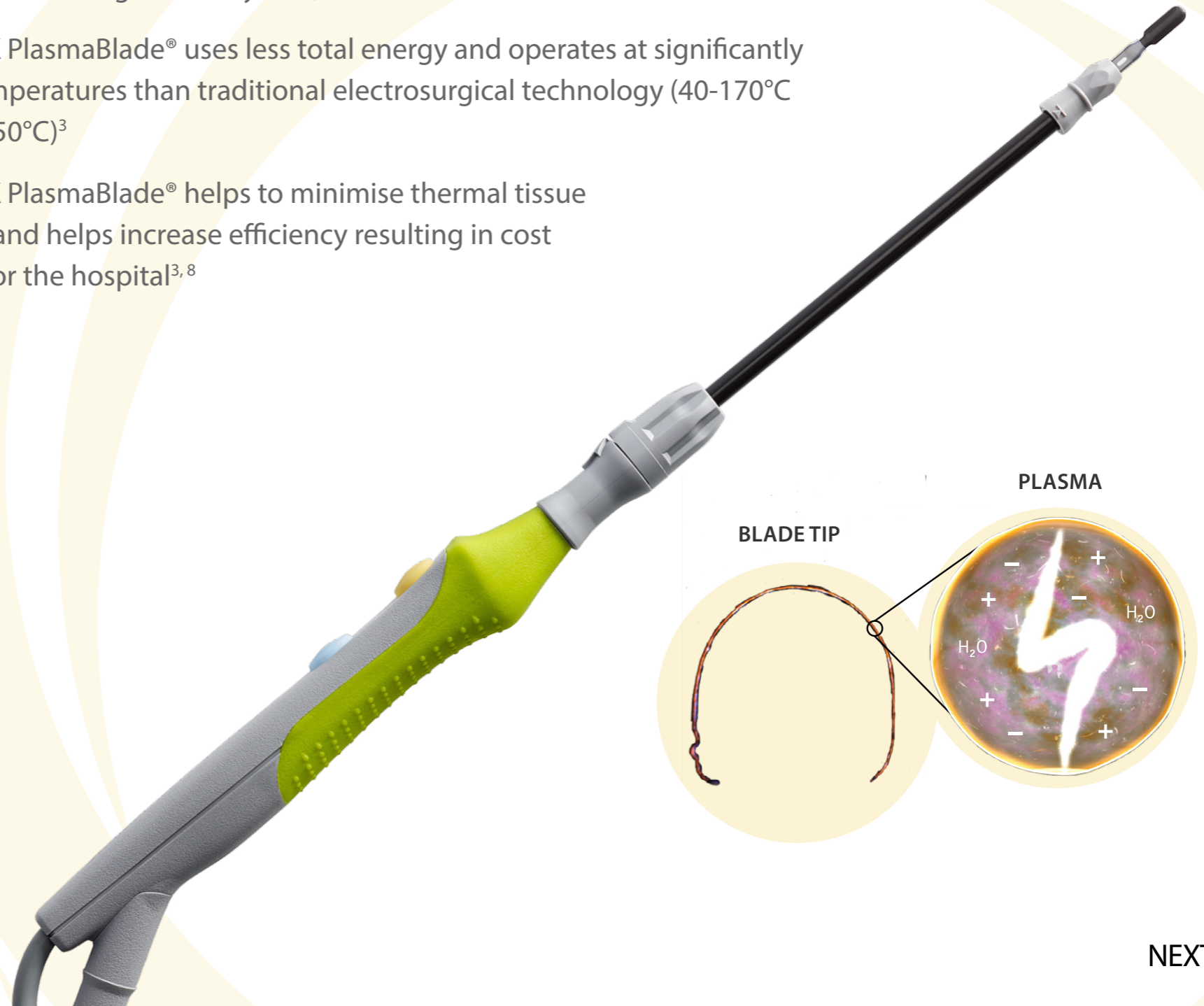


PEAK PlasmaBlade®

The PEAK PlasmaBlade® is a surgical dissection instrument that uses very brief, high frequency pulses of RF energy to induce electrical plasma along the outer edge of a very thin, 99.5% insulated electrode.⁴

The PEAK PlasmaBlade® uses less total energy and operates at significantly lower temperatures than traditional electrosurgical technology (40-170°C vs. 200-350°C)³

The PEAK PlasmaBlade® helps to minimise thermal tissue damage and helps increase efficiency resulting in cost savings for the hospital^{3,8}



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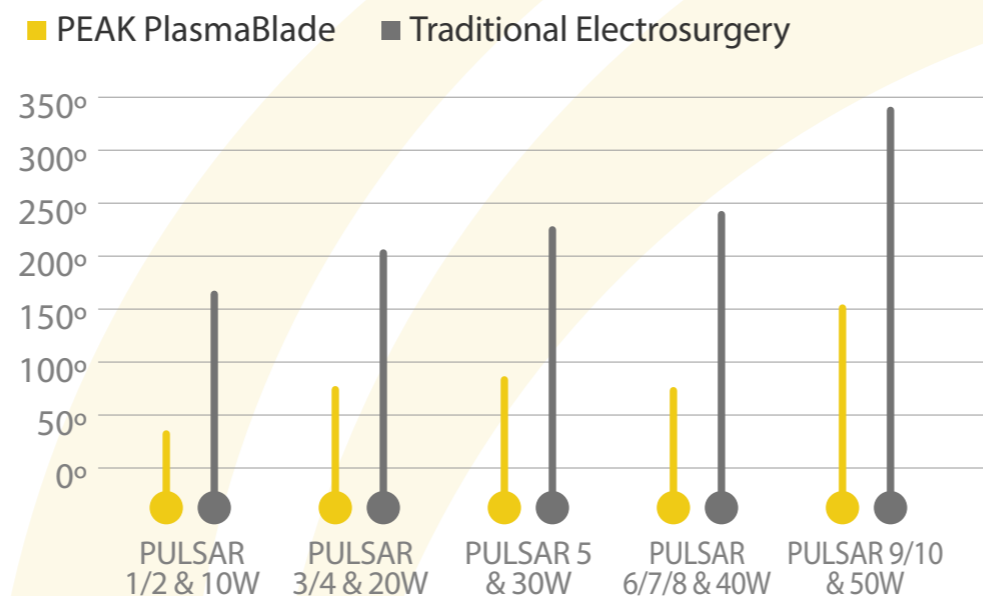
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Lower temperatures, better for patients

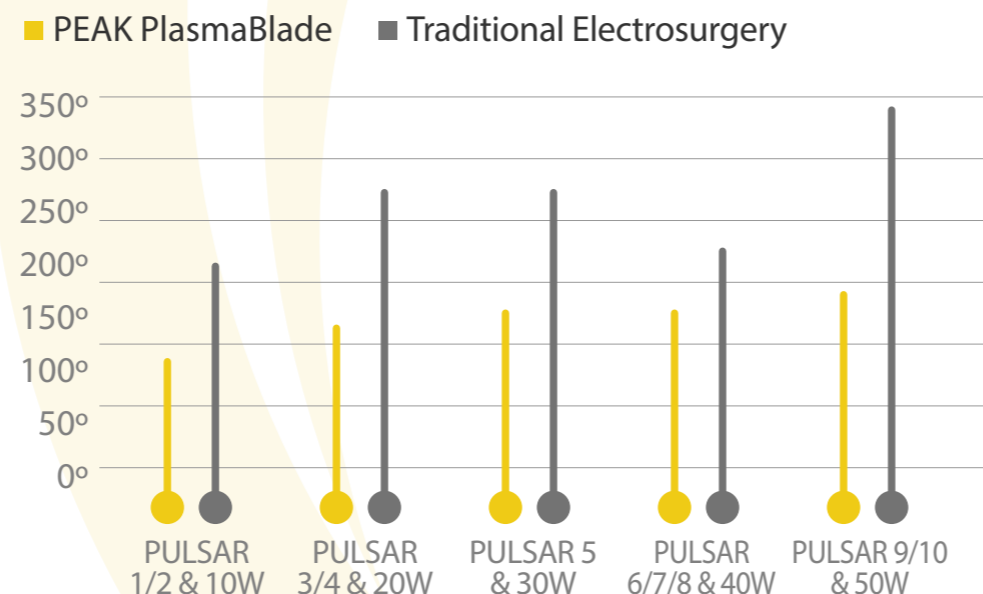
TEMPERATURE PROFILE CUT SETTINGS⁹



64%
REDUCTION

The PEAK PlasmBlade demonstrated an average **64% reduction in blade temperature** compared to traditional electrosurgery for similar cut settings

TEMPERATURE PROFILE COAG SETTINGS⁹



40%
REDUCTION

The PEAK PlasmBlade demonstrated an average **40% reduction in blade temperature** compared to traditional electrosurgery for similar coag settings

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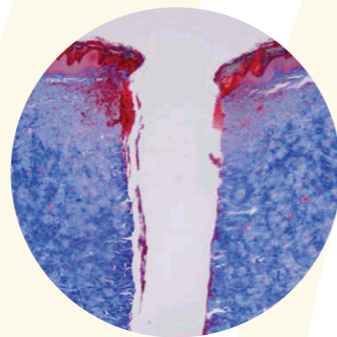
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THERMAL INJURY PROFILE

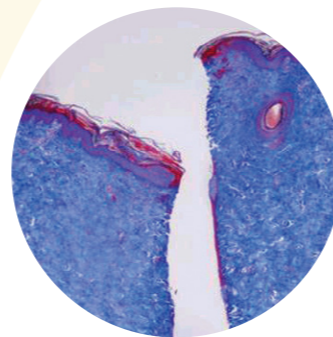
The PEAK PlasmaBlade® has demonstrated a 74% reduction of thermal tissue damage compared to electro cautery⁴

Tissue effect is similar to the use of a scalpel and significantly improves wound strength, wound healing and the cosmetic appearance of scars^{3,4}

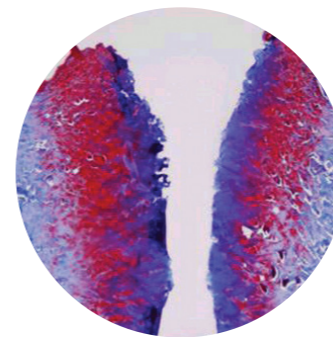
74%
REDUCTION



SCALPEL CUT



PLASMA BLADE CUT



ELECTROSURGERY CUT



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Lower temperatures, better for patients



74% reduction of thermal tissue damage⁴



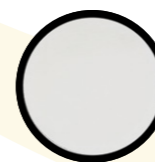
Improve efficiency using single skin to skin instrument



Reduce inflammatory response compared to traditional electro surgery⁴



Minimise exposure to surgical smoke⁹



Peak PlasmaBlade 4.0 CUT 6



Traditional Electrosurgical Instrument CUT 40 watts



Peak PlasmaBlade 4.0 COAG 6



Traditional Electrosurgical Instrument Area COAG 40 watts



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PEAK PLASMABLADE 4.0

- Ergonomic handle design for comfort and control
- Precise 4.0mm-wide electrode
- Bendable shaft
- Rotating tip



PEAK PLASMABLADE 3.0S

- Ergonomic handle design for comfort and control
- Telescoping shaft from 5.5cm to 15cm with locking mechanism for improved stability
- Precise 3.0mm-wide electrode
- Integrated suction for less smoke exposure and enhanced visibility



PEAK PLASMABLADE NEEDLE

- Needle tip electrode for high precision
- Bendable shaft
- Rotating tip



◀ BACK



The Aquamantys[®] System

THE HEMOSTATIC SOLUTION FOR YOU, YOUR PATIENT AND YOUR HOSPITAL

The Aquamantys[®] System uses Transcollation[®] Technology – a combination of RF energy and saline – to provide hemostatic sealing of soft tissue and bone during surgery. The combination of RF energy & saline allows the device temperature to stay at approximately 100°C – nearly 200°C less than conventional devices. The lower operating temperature produces a tissue effect without the associated smoke and charring found in other methods

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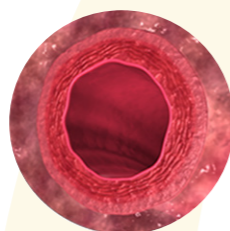
The Aquamantys[®] System

PEAK PlasmaBlade[®]
The proven value

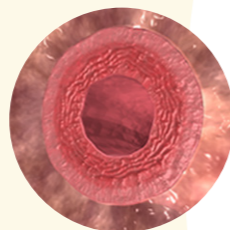
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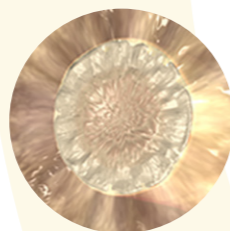
References



STEP 1
RF energy and saline are applied to tissue



STEP 2
Shrinkage of collagen in the vessel occurs



STEP 3
Vessels <1 mm in diameter may be occluded





Lower temperatures, better for patients



Reduce blood loss and transfusion rates^{10,11,12}



Improve visibility in the surgical field, allowing to be more confident to work near critical structures¹



Decrease surgical time^{13,14}



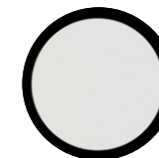
Lower complication rates, improving patient outcomes^{10,15}



Minimise exposure to surgical smoke⁹



Traditional
Electrosurgical
Instrument
CUT 40 watts



Aquamantys 6.0
Bipolar Sealer Area
COAG
170 watts



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Tailored design for effective and quick bleeding control

AQUAMANTYS® BIPOLAR SEALERS

A wide variety of handheld disposables are available to enable surgeons to effectively & quickly achieve hemostasis for:

- bleeding of large tissue planes & bone and (6.0, 2.3 & SBS 5.0 open sheath)
- bleeding near sensitive structures such as dura & nerve roots (EVS, Mini EVS, SBS 5.0 closed sheath)

MBS MALLEABLE BIPOLAR SEALER WITH LIGHT

Malleable shaft and built in light allow surgeons to reach difficult anatomies & aids in improved visibility

6.0 BIPOLAR SEALER

Large sized electrode design for treatment of large soft tissue planes & bone

2.3 BIPOLAR SEALER

Medium sized electrode design for more precise hemostatic sealing

SBS 5.0 SHEATHED BIPOLAR SEALER

Retractable sheath that allows surgeon flexibility to use near sensitive structures such as dura & nerve roots (sheath closed) and for treatment of large soft tissue planes & bone (sheath open)

(MINI) EVS EPIDURAL VEIN SEALER

Insulated shaft enables surgeons the use near sensitive structures like dura & nerve roots

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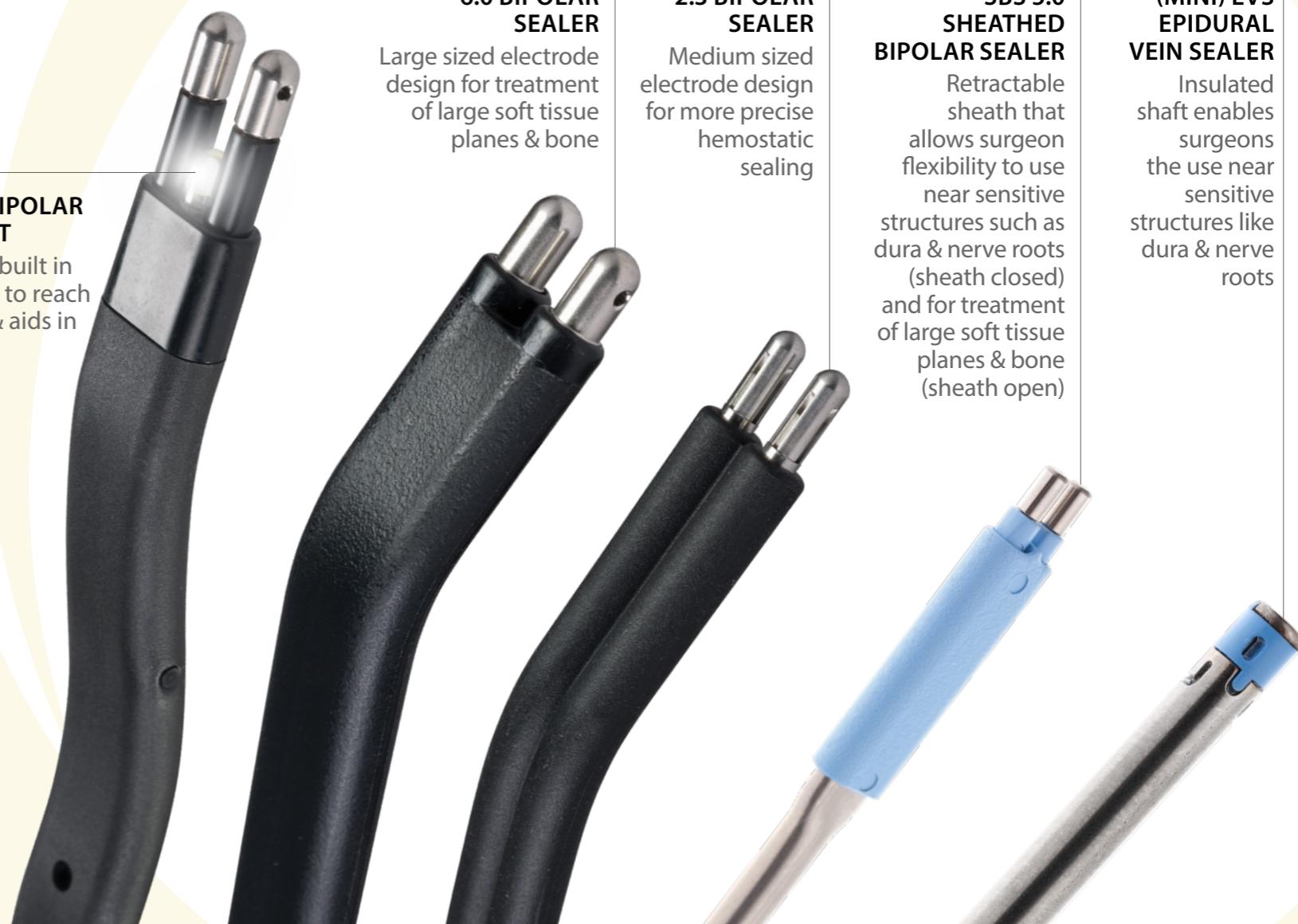
The Aquamantys® System

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The proven value of PEAK PlasmaBlade®

Better outcomes for patients, physicians and hospitals



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Cardiac device replacements

Breast oncology &
reconstructive surgery

Orthopedic surgery

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Cardiac device replacements



Breast oncology & reconstructive surgery



Orthopedic surgery





Cardiac device replacements

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► **Cardiac device replacements**

Breast oncology & reconstructive surgery

Orthopedic surgery

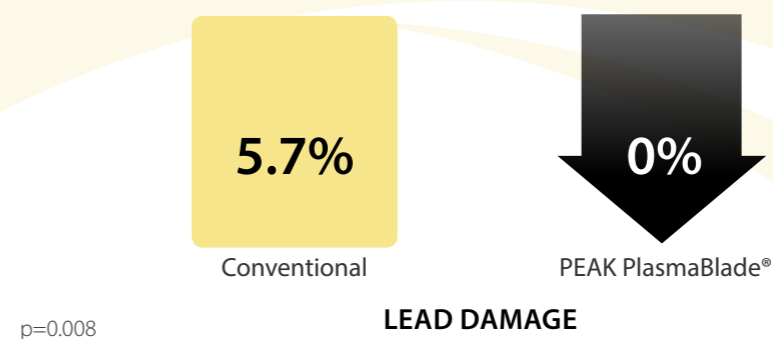
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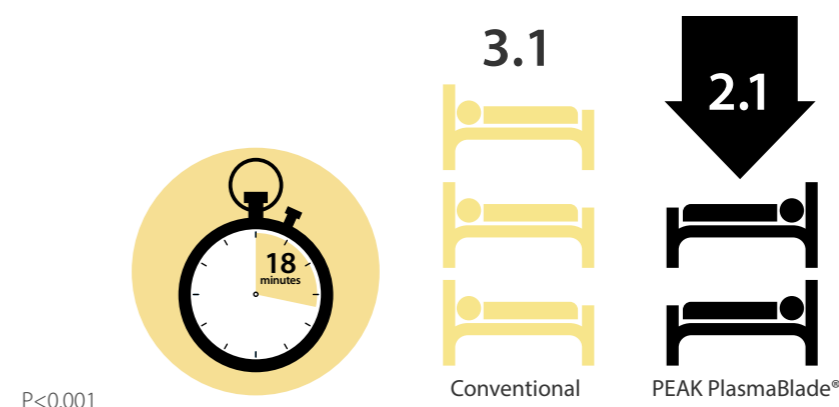
Safe

Significant lower risk of lead damage⁸



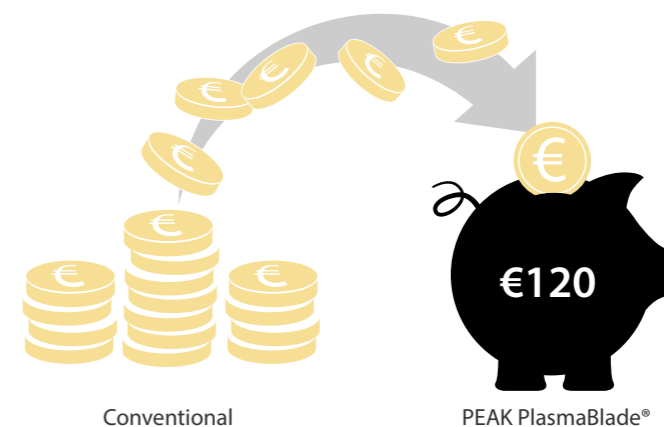
Efficient

- Shorter cath lab time⁸
- Shorter hospital length of stay⁸



Cost Saving

Using the PEAK PlasmaBlade® for cardiac device replacements results in a net cost per patient saving of €120 for the hospital⁸





Breast oncology & reconstructive surgery

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Cardiac device replacements

► **Breast oncology & reconstructive surgery**

Orthopedic surgery

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Reduce mean drainage volume & duration in mastectomies

Atraumatic cutting with less thermal damage results in shorter drainage duration and amount¹⁶



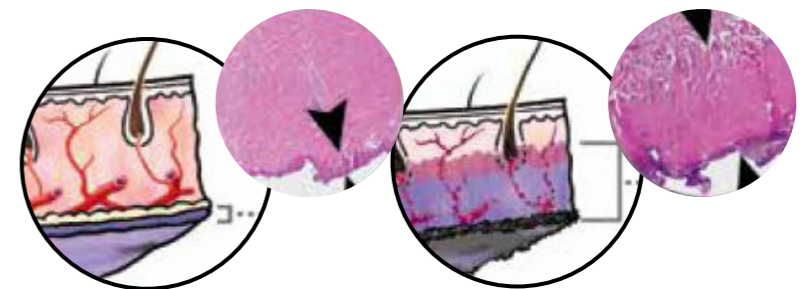
Reduce thermal damage to surgical margins⁴

Improving the quality of histopathology specimens



Improves wound strength, wound healing & cosmetic appearance of scars

Reducing the incidence of tissue necrosis and preserving the subcutaneous vascular structure are imperative for optimal reconstruction¹⁷



Resource Efficient

Using the PEAK PlasmaBlade to reduce drainage volume and duration may contribute to shorter hospital length of stay and associated costs





Orthopedic surgery

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Save time⁹

The result of using PEAK PlasmaBlade versus scalpel/ traditional electro surgery is improved bleeding control and elimination of instrument exchanges (demonstrated in total knee arthroplasty)





The proven value of the Aquamantys[®] System

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Spine surgery

Surgical oncology

Orthopedic surgery

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Spine surgery



Surgical oncology



Orthopedic surgery





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► Spine surgery

Surgical oncology

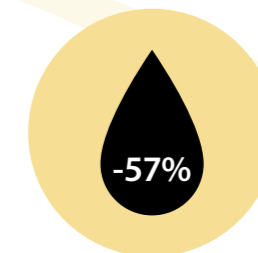
Orthopedic surgery

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Reduce Blood Loss

The Aquamantys® System has proven to lower blood loss and transfusion rates.¹¹ This may decrease complications and post-operative morbidity



Save time

Decrease surgical time and improve continuity during surgery due to improved visibility of the surgical field^{1,13}



Resource Efficient

Using the Aquamantys® System to reduce blood loss & complication rates may contribute to reduced hospital length of stay and associated costs^{18,19}





Surgical oncology

Liver resection, Distal pancreatectomies, Partial nephrectomies

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Spine surgery

► **Surgical oncology**

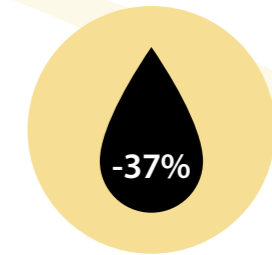
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Reduce blood loss and lower transfusion rates

Using the Aquamantys System in combination with Cusa for liver resection can result in significant lower blood loss (677 ml vs. 1076 ml, p=0.0486).²⁰ Transfusion rates are as low as 3.5% compared to published averages of 15-35%¹²



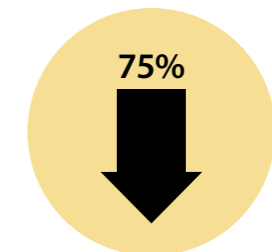
Save time

Hepatic transection time can be significantly reduced¹²



Decrease complication rates

Novel method of stump closure for distal pancreatectomy with a 75% reduction in pancreatic fistula rate²¹



Resource Efficient

Using the Aquamantys® System to reduce blood loss & complication rates may contribute to reduced hospital length of stay and associated costs^{18,19}





Orthopedic surgery

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Significantly improving blood management

- Lower intra-operative blood loss & transfusion rates^{10,22,23}
- Reduced post operative drainage²³
- Maintained hemoglobin levels¹⁰



Lower complication rates

Fewer hematomas (hip arthroplasty) and reduced post-operative incidence of hemarthrosis may lead to less pain and swelling^{15,23}



Cost effective

The use of Aquamantys System has demonstrated a reduction in hospital length of stay for revision hip arthroplasty.¹⁵ Minimising length of stay and complication rates may result in lower hospital costs





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AEX GENERATOR & ACCESSORIES

AEX Generator 40-405-1

AQUAMANTYS® BIPOLAR SEALERS

Aquamantys 6.0 Bipolar Sealer 23-112-1

Aquamantys 2.3 Bipolar Sealer 23-113-1

Aquamantys 9.5XL Bipolar Sealer 23-313-1

Aquamantys Endo DBS 8.7 Bipolar Sealer 23-317-1

MBS Malleable Bipolar Sealer with Light 23-301-1

Aquamantys SBS 5.0 Sheated Bipolar Sealer 23-312-1

Mini EVS Epidural Vein Sealer 23-314-1

PEAK PLASMABLADE®

PEAK PlasmaBlade 4.0 PS200-040

PEAK PlasmaBlade 3.0S PS210-030S

PEAK PlasmaBlade Needle PS 200-001

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For a listing of indications, contraindications, precautions, warnings and potential adverse events, please refer to the instructions for use.

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