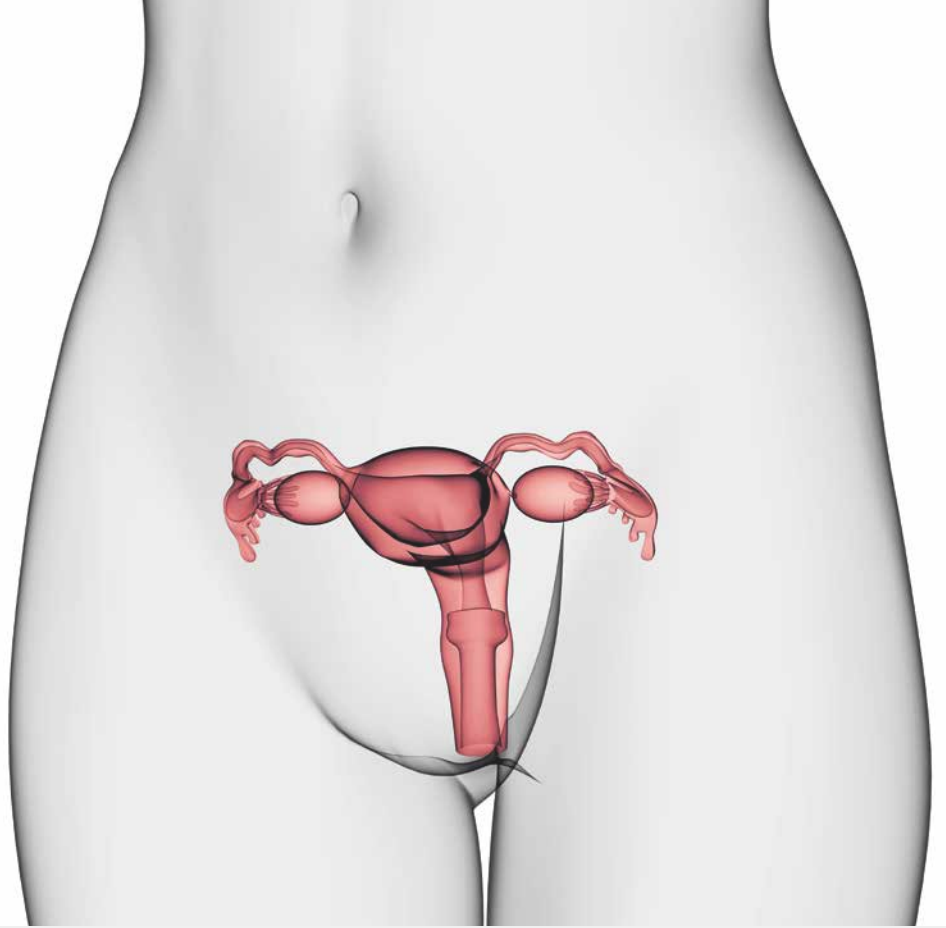




Energy-based solutions for gynecology



Together with our customers, we are committed to innovating reliable and trendsetting energy-based surgical solutions. Every day, we passionately work on developing products and services that assist in optimizing clinical results which contribute to the well-being of the patient.

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Surgical innovation is our passion



This is a promise we have pursued in surgery since 1896. With this claim in mind, we develop and market medical technology solutions. And in many cases, we have set new benchmarks.

The KLS Martin Group is the umbrella brand for the companies KLS Martin in Germany and in the USA, as well as numerous subsidiaries and representative offices throughout the entire world. Our products are used in more than 140 countries all over the world. We are proud of this achievement and will continue advancing patient treatment. Worldwide.

The individual needs in gynecology are as specific as the female anatomy. We are dedicated to the health of women worldwide, which is why we continuously advance our solutions for gynecology. With advanced technologies specifically developed for the surgical treatment of gynecological conditions, KLS Martin has significantly improved precision and safety during surgeries. Products like the marSeal®5 plus Maryland assist surgeons worldwide in the efficient treatment of women, whether it be for cancer surgeries, hysterectomies, or the treatment of other gynecological conditions.

In doing so, KLS Martin makes an important contribution to promoting women's health and quality of life worldwide. Therefore, we are highly engaged in national and international women's health organizations. Together with the Electrosurgical Expert Group (ESEG®), we are building up a global network to enhance the quality of surgical treatments in gynecology.



Shaping the future of electrosurgery

Real experts.
One inspiring community.



Join our international training courses to expand your knowledge and train your skills in gynecological surgery.



Goals and mission of the Electrosurgical Expert Group

- promote science, development and research
- continuous transfer of knowledge through training and education on global as well as on regional level
- improve awareness of advances in medicine through public relations
- bring innovations and developments in gynecology worldwide together

To be a part of the Electrosurgical Expert Group means:

- to participate in a scientific and technical way
- to develop and clinically evaluate new techniques, devices, and therapies
- to evaluate and publish scientific studies and research results
- to support cooperation between local and international institutions



Visit our website to register
for your ESEG® course
and find out more about our vision.

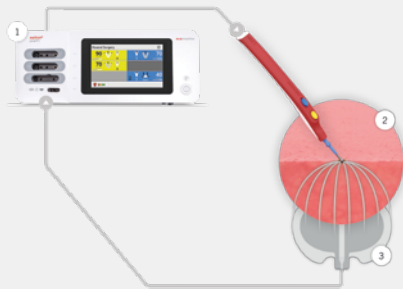
www.electrosurgicalexpertgroup.com/events



Join our network @electrosurgicalexpertgroup

Working principle of energy devices

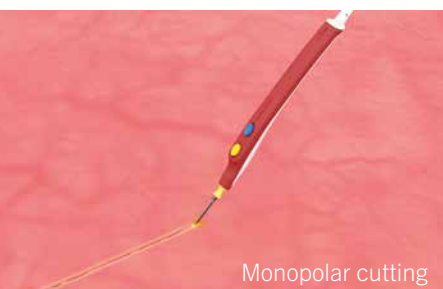
Electrosurgery



Monopolar application



Bipolar application



Electrosurgery is the application of high frequency current through biological tissue with the goal of achieving a medically useable thermal effect.

In electrosurgery, there are two techniques of application: monopolar and bipolar. When working monopolar, the current flows from the active electrode through the patient to the neutral electrode. A high current density arises at the active electrode, where we get the intended thermal effect. With the bipolar technique, the road of the high-frequency current is limited to the tissue area between the two parts of the instrument. Due to the limited current path, bipolar technique has lower power requirements than the monopolar technique. Therefore, the bipolar technique is superior in regard of safety.

The thermal effect is dependant on the temperature at the active electrode.

Cutting:

Tissue is heated up to several hundred degrees °C:

- cells vaporize → scalpel effect

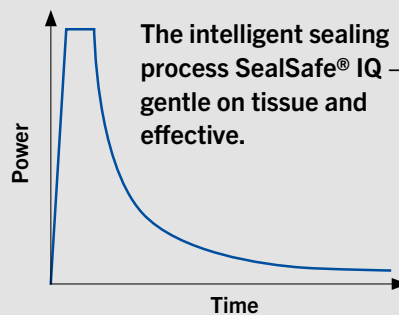
Coagulation:

Temperatures between 60°C and 90 °C:

- proteins denaturate → cells glue together → hemostasis

SealSafe® IQ

The new generation of intelligent vessel sealing



Vessel sealing:
up to Ø 7 mm*

Minimal lateral thermal
spread: **< 2 mm**

*with a mean burst pressure
of over 360 mmHg

Safe – vessel sealing with SealSafe® IQ

The special bipolar current SealSafe® IQ rings a new generation of bipolar vessel sealing solutions from KLS Martin. It has been carefully enhanced to meet users' needs for usability, efficiency, and performance.

The SealSafe® IQ provides the latest sealing technology to achieve an optimal sealing result. In combination with KLS Martin SealSafe® IQ instruments and SealSafe® IQ-Generators, it forms a sealing system that converts endogenous structural proteins like collagen and elastin in such a way that veins, arteries and tissue bundles are permanently and reliably sealed.



Our energy-based solutions for gynecology

Bipolar vessel sealing



marSeal®5 plus and **marSeal®5 plus Maryland** –
a new dimension in intelligent vessel sealing

- Reusable instruments for efficient sealing and dissection of vessels tissue bundles.
- Multifunctionality: Vessel sealing, tissue dissection, bipolar coagulation and tissue preparation – all in one instrument

marSeal®5 IQ



maXium® sealer –
simplicity meets excellence in vessel sealing

- Optimized our sealing – faster and safer than ever before.
- The user-friendly Plug and Play function für IQ-instruments
- Stand-alone or connected with a maXium® smart C.

Integration in the **maXium® smart C**

80-051-01-04

Stand-alone unit

80-051-00-04



marClamp® Cut IQ 18 & 23 –
unbeatable for efficiency and economy

- Developed for open surgical vessel sealing and, in addition to tissue preparation and vessel sealing, also serves for subsequent tissue separation
- The extended design of our instrument allows access to previously inaccessible places.



marClamp® IQ –
intelligent vessel sealing for open surgery

- Effective, lasting and safe sealing of vessels and tissue bundles.
- Different instrument geometries give each user the right instrument for the task at hand.

maXium® smart Q und **maXium®** smart Q
The smart choice for every OR

- A new era of electrosurgery begins
- Variability through different variants
- Intelligent vessel sealing with SealSafe® IQ
- Special currents for bipolar resection

maXium®
smart Q



Our energy-based solutions for gynecology

Mono- and bipolar instruments



smartOne® –
safe and simple

- Great variety of electrodes in different shapes and sizes
- smartOne® Vac: monopolar handles with integrated smoke evacuation



marCut® –
safe and universally applicable

- The bipolar scissors with consistently sharp cutting edge.
- Connection of the bipolar cable to only one shank facilitates the surgeon's work



nonStick red –
revolutionary ergonomic design

- Special coating for non-stick effect

maXium® smart C

- Clear and simple operation
- Standard currents and special current options
- Different socket configurations
- Stand alone, or integratable in the smartLine workstation with maXium smart Cart, maXium® smart Vac and maXium® sealer or maXium® smart Beam



marLap –
bipolar coagulation in laparoscopy

- Bipolar instruments for laparoscopy
- Exchangeable electrodes for coagulation and cutting



maXium® smart C –
the touch of simplicity

maXium® sealer –
the maXium® smart C can be combined with the maXium® sealer, to enable the power of vessel sealing.

marLase Pro® — exploring new ways in laser technology

The marLase Pro® is KLS Martin's innovative high-end laser platform for surgical and aesthetic CO₂ laser procedures

Benefits

- Outstanding beam quality and precision
- Broad range of tissue effects and clinical applications
- Intuitive user interface with indication specific programs
- Acoustic announcement of the laser mode
- Video animations of handling viewable on the screen
- Low-noise and maintenance-free air cooling
- Permanently stable optics due to sophisticated damping system
- Full range of sophisticated accessories



Scan for more
information!

www.klsmartin.com/marlase-pro



MicroPoint® 3

- Micromanipulator for ENT and gynecology
- Adapter plates for all common microscopes and colposcopes available
- Increased focus depth
- Compact design
- Secure adaptation thanks to bayonet lock and additional locking screw
- Large mirror offers a wide field of vision



Ready for laparoscopic procedures

The marCoupler red (77-470-00-04) allows a laparoscopic use of the laser:

- ✓ Fast and gentle use of the laser in laparoscopic procedures
- ✓ Allows a use with scan figures or focused laser spot
- ✓ Endometriosis treatment possible

Sustainability in bipolar vessel sealing

If the health sector were a country, it would be the fifth largest emitter in the world¹

Seal the Deal...

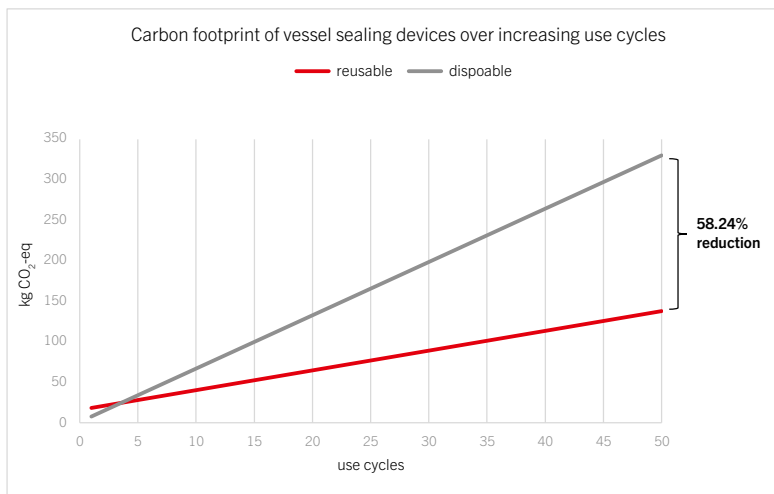


... and **Cut the Waste** with our reusable sealing solutions!

The disposable materials share of our bipolar vessel sealing instruments has been reduced to the bare minimum. After the procedure, only the blade has to be replaced. By using our reusable solutions, you can save up to 75% of costs and 58% of CO₂-Emissions¹.

¹www.klsmartin.com





The reusable device outperforms the environmental performance of disposable products from the 4th use onwards.

Single-use components



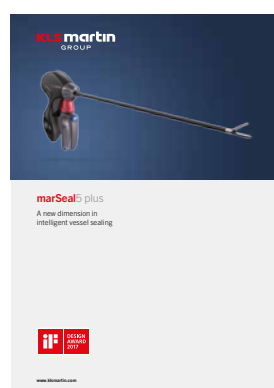
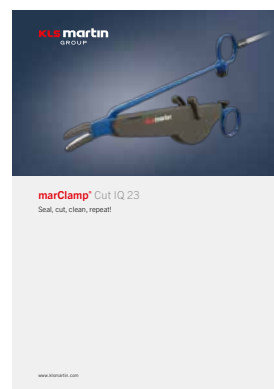
QR-Code KLS Martin | Sustainability calculator

Reusable components (sterilizable up to 50 times)



Are you interested in how much CO₂ and costs you can save by switching to our reusable vessel sealing solutions? Follow the QR-code to our sustainability calculator to generate the potential savings for your individual use case.

Want to know more about the sustainability of our products? You can download our whitepapers on marClamp® Cut and marSeal®5 plus through the QR-code.





Product application

Abdominal Hysterectomy	Adnexectomy
Instruments ■ marSeal®5 plus Maryland 23 cm ■ marClamp® Cut IQ 23 ■ marCut®	Instruments ■ marSeal®5 plus Maryland ■ marSeal®5 IQ
TLH	Salpingectomy
Instruments ■ marSeal®5 plus Maryland ■ marSeal®5 IQ	Instruments ■ marSeal®5 plus Maryland ■ marSeal®5 IQ
LAVH	Endometriosis
Instruments ■ marSeal®5 plus Maryland ■ marSeal®5 IQ	Instruments ■ marSeal®5 plus Maryland



LASH	LLETZ-Conisation
Instruments ▪ marSeal®5 plus Maryland ▪ marSeal®5 IQ	Instruments ▪ smartOne® conisation electrodes ▪ marLasePro®

Pelvic lymphadnectomy	Mastectomy
Instruments ▪ marSeal®5 plus Maryland ▪ marSeal®5 IQ	Instruments ▪ smartOne® telescope handle ▪ marClamp® Cut IQ 23 ▪ marCut®

Myomectomy
Instruments ▪ marSeal®5 plus Maryland ▪ marSeal®5 IQ

marLase Pro® indications:

- Excision and vaporisation of benign neoplasms
- Excision and vaporisation of condylomata
- Conisation
- Vaginal and vulvar surgery

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