



ENT, Plastic and Aesthetic Surgery

Solutions with the CURIS® 4 MHz Radiofrequency Generator



PRECISION ELECTROSURGERY
Made in Germany

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CURIS® 4 MHz Radiofrequency Generator

One unit – many applications



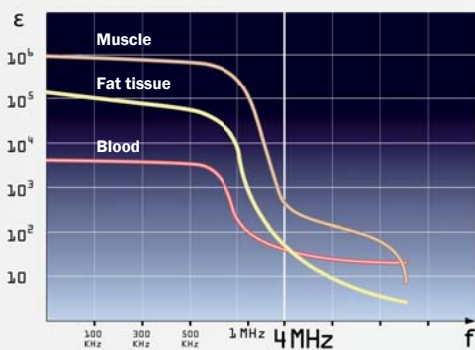
The CURIS® 4 MHz radiofrequency generator relies on innovative 4 MHz technology: It is gentle to the tissue and effective for coagulation, for submucosal shrinkage, and for cutting. Scientific studies have shown that tissue trauma may be reduced by using CURIS® 4 MHz radiofrequency technology.¹

CURIS® 4 MHz Radiofrequency Technology

The higher the frequency, the less the resistance of biological tissue to electromagnetic fields – up to the point where cell membranes are capacitively coupled. This effect is created by the CURIS® 4 MHz radiofrequency generator in all monopolar and bipolar modes. When using conventional electrosurgical units the electromagnetic field concentrates between the cells and only heats up the outer layer. However, with the CURIS® 4 MHz radiofrequency generator cell membranes are conductive, and energy is absorbed evenly inside the cells.² As a result, energy is administered gently and in a highly focused fashion. Precise monopolar cuts are possible while lateral heat damage is kept to a minimum.³

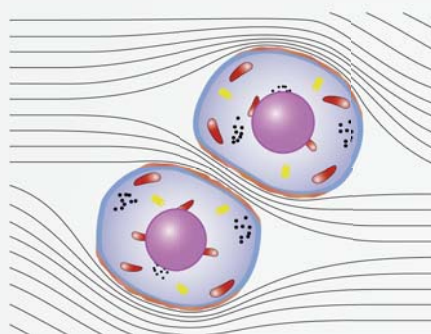
¹ Muehfay G et al. A study on the type of lesions achieved by three electrosurgical methods and their way of healing. Romanian Journal of Morphology & Embryology. 2015; 56(4): 1383-1388
² Holder DS. Electrical Impedance Tomography- Methods, History and Applications. IOP Publishing Ltd. 2005
³ Hoffmann TK et al. Comparative analysis of resection tools suited for transoral robot-assisted surgery. European Archives Oto-Rhino-Laryngology. 2014; 271 (5) : 1207-1213

Permittivity/Frequency



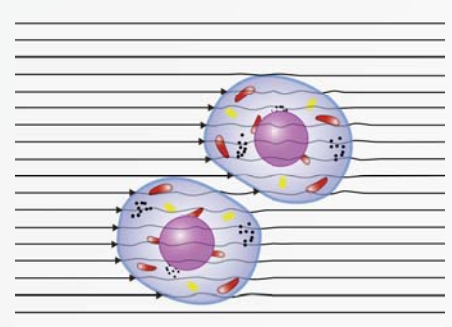
This diagram shows the permittivity of tissue, which depends on the frequency of the electromagnetic field.

Conventional electrosurgical units



The electromagnetic field concentrates between the cells and heats up only the outer layer.

CURIS® 4 MHz Radiofrequency Generator



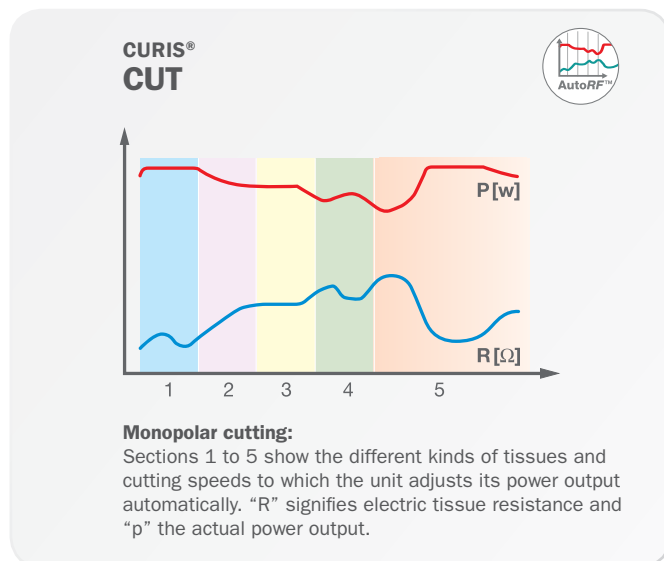
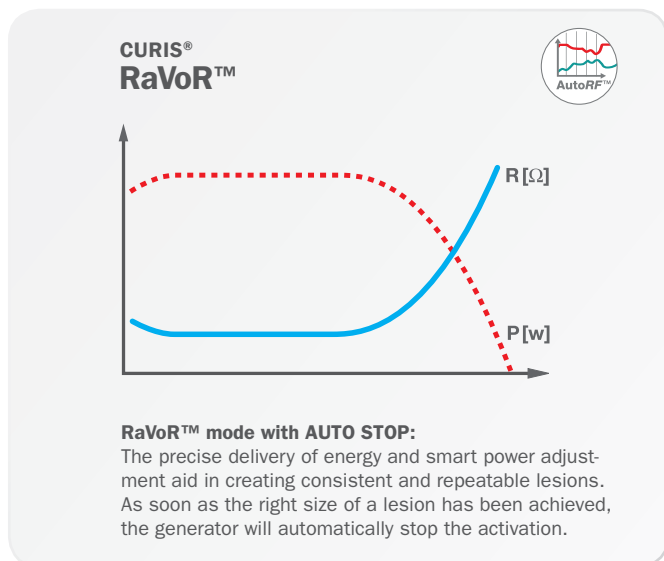
Cell membranes are conductive and the energy is absorbed evenly inside the cells. The result are highly focused tissue effects.



Precision thanks to **AutoRF™**

AutoRF™ is a smart impedance control function that will tailor the power output of the CURIS® 4 MHz radiofrequency generator to the tissue condition. Whether it is cutting through different types of tissue (such as mucosa, muscle, fat or connective tissue) or altering tissue conditions during coagulation, the AutoRF™ feature will deliver adapted power output as required by the different tissue impedance.

When dissecting different types of tissue in one cut (skin, fat, muscles), the unit has to process and respond to the AutoRF™ data in a flash. For this reason, the CURIS® 4 MHz radiofrequency generator has two microprocessors for additional safety and speed.



p³™-Technology



p³™, which stands for pulsed power performance, is active in all coagulation modes of the CURIS® 4 MHz radiofrequency generator. Radiofrequency energy is delivered in about 50 small packages per second. Due to the pulsed power output, there are short breaks between the individual packages, giving the tissue enough time to absorb the energy. Highly focused, yet gentle coagulation with minimal thermal damage is possible.

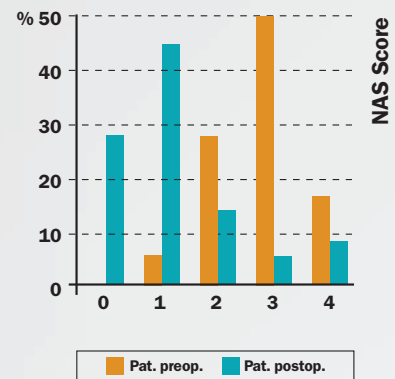
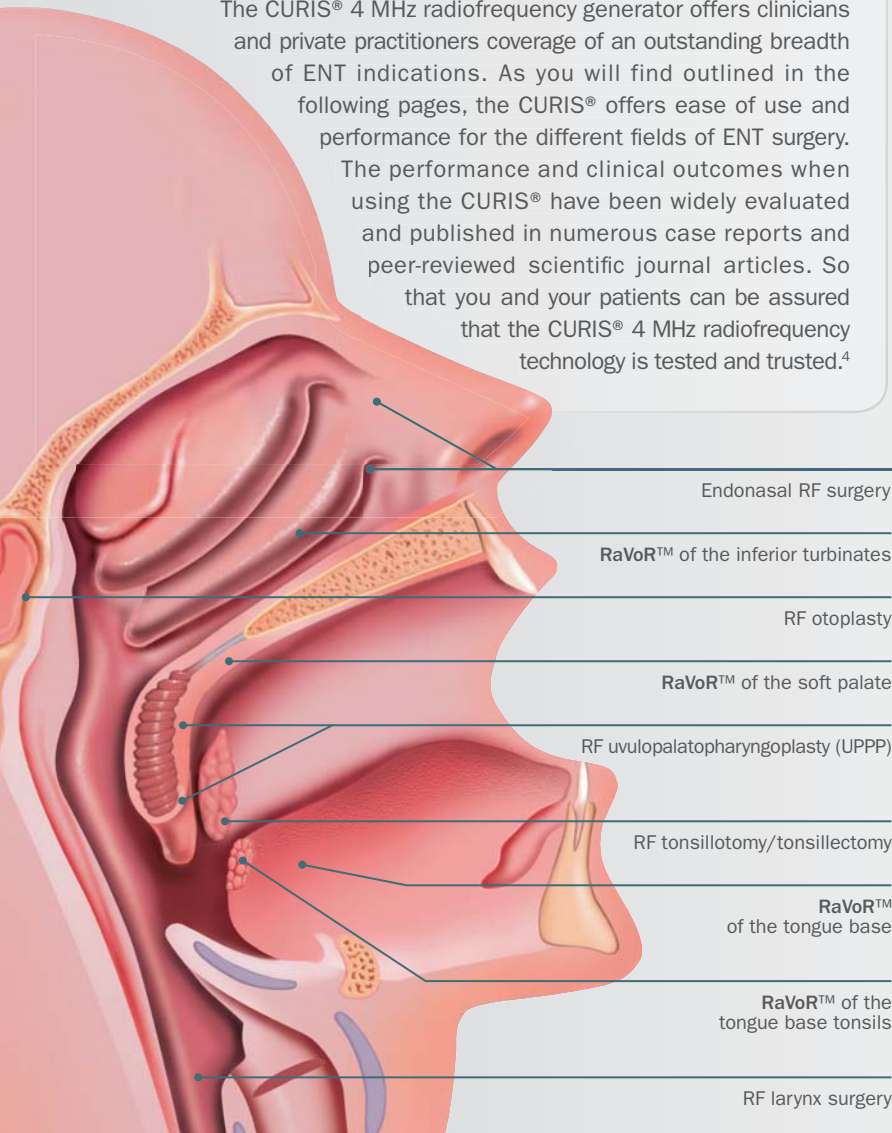


CURIS®: one device - many applications

Versatility in ENT

The CURIS® 4 MHz radiofrequency generator offers clinicians and private practitioners coverage of an outstanding breadth of ENT indications. As you will find outlined in the following pages, the CURIS® offers ease of use and performance for the different fields of ENT surgery.

The performance and clinical outcomes when using the CURIS® have been widely evaluated and published in numerous case reports and peer-reviewed scientific journal articles. So that you and your patients can be assured that the CURIS® 4 MHz radiofrequency technology is tested and trusted.⁴



Snoring intensity pre- and postoperatively after treatment of nasal turbinates and soft palate

Marinescu, A. Innovative Bipolar Radiofrequency Volumetric Reduction with "ORL-Set" for Treatment of Habitual Snorers. *Laryngo-Rhino-Otol*, 2014, 83 (9): 610-616

RaVoR™ Radiofrequency Volume Reduction

Bipolar radiofrequency volumetric tissue reduction, using Sutter technology, appears to have promising results for patients with snoring and mild OSA. One treatment session resulted in significant reduction in snoring intensity, improvement in sleep quality and QOL, and reduction in daytime sleepiness.

Pang et al. Sutter bipolar radiofrequency volume reduction of palate for snoring and mild obstructive sleep apnea. *The Journal of Laryngology & Otology*. 2009; 123: 750-754

RaVoR™ Radiofrequency Volume Reduction

RaVoR™ of the inferior turbinates, soft palate, tongue base, etc. is an interstitial application for submucosal tissue shrinkage. Precise delivery of energy and smart power adjustment depending on actual tissue impedance aid in creating consistent and repeatable lesions. As soon as the right size of a lesion has been achieved, the CURIS® 4 MHz radiofrequency generator will automatically stop the activation (AUTO STOP mode), and give an acoustic signal. The treated tissue is decomposed by the body's own immune system and transformed into fibrous scar tissue. This process leads to a shrinkage and stiffening of the treated area.

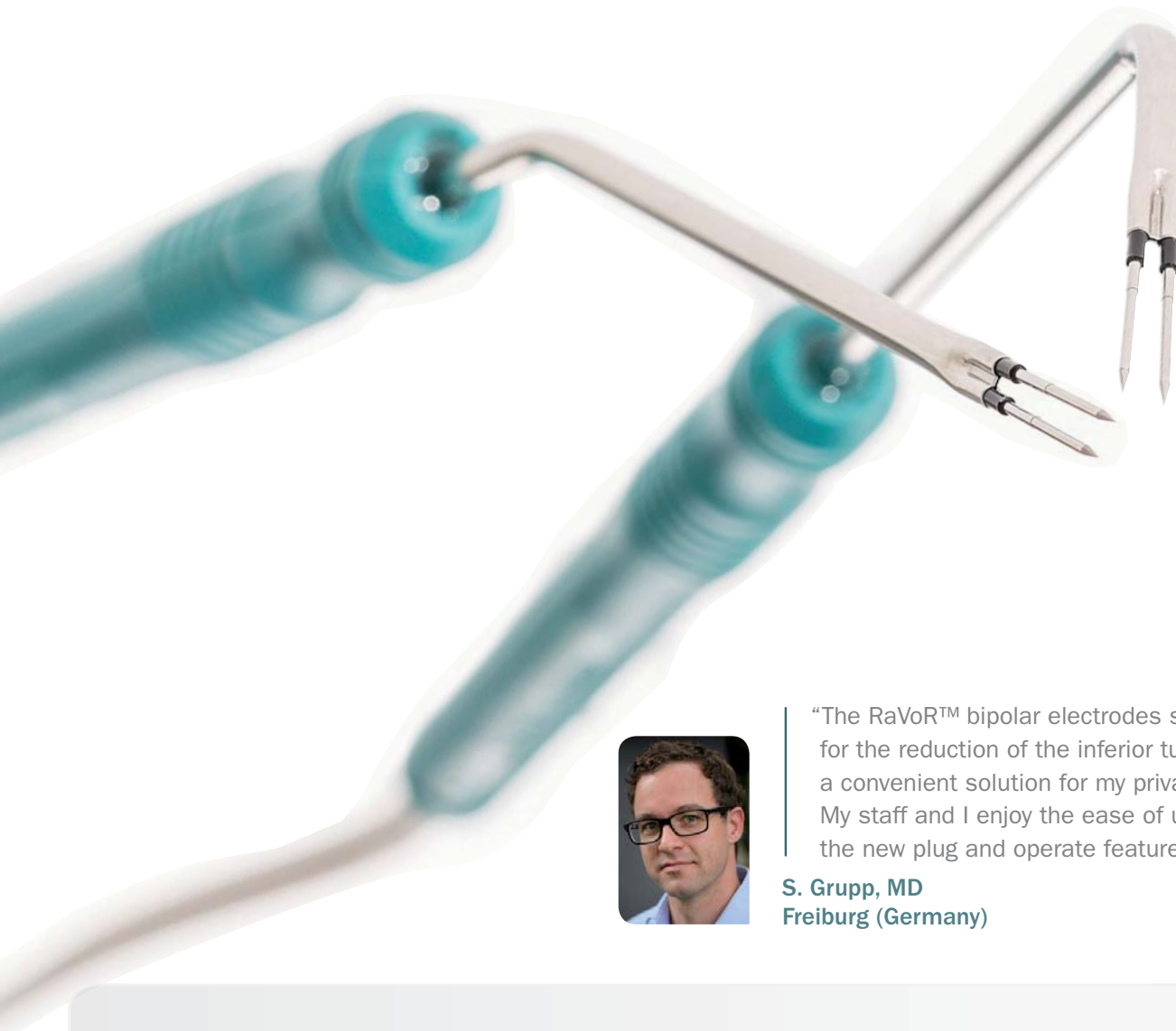
Sutter has developed different bipolar electrodes for the treatment of sleep-related breathing disorders based on the anatomical sites of obstruction.

Audio Feedback

If desired, an acoustic feedback function (AUDIO FEEDBACK) can be activated. While a lesion is created in RaVoR™ mode, the change in tissue condition is signaled by a changing pitch: The further the lesion progresses, the higher the activation sound. This mode may also be used to potentially increase the patient's comfort. The patient will be able to listen and follow what happens inside the tissue.

⁴ Brumann M et al. Comparison of Functional Expansion Pharyngoplasty with Radiofrequency Volume Reduction of the Soft Palate in Surgery for Sleep-related Breathing Disorders. *Journal of Sleep Medicine & Disorders*. 2017; 4(1):1073
 Basterra J et al. Eighty-three cases of glottic and supraglottic carcinomas (stage T1-T2-T3) treated with transoral microelectrode surgery: how we do it. *Clinical Otolaryngology*. 2011 Oct; 36(5):500-4
 Additional references available upon request.

RaVoR™ bipolar electrodes single-use

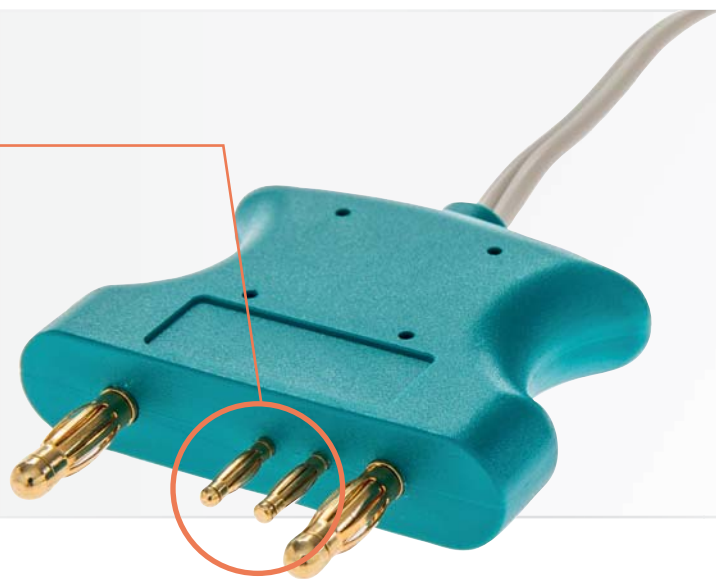


“The RaVoR™ bipolar electrodes single-use for the reduction of the inferior turbinates are a convenient solution for my private practice. My staff and I enjoy the ease of use due to the new plug and operate feature.”

S. Grupp, MD
Freiburg (Germany)

Plug and operate

- Convenient handling for surgeon and staff
- Perfect match with the CURIS® 4 MHz radiofrequency generator
- Auto recognition of the instrument and instant selection of the RaVoR™ program
- CURIS®-Precision thanks to AutoRF™



single-use



70 44 62
RaVoR™ bipolar electrode
for the inferior turbinates, single-use
working length: 103 mm



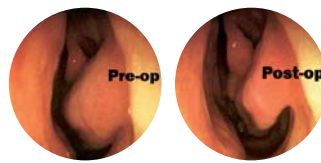
1:1

70 04 62
RaVoR™ bipolar electrode for the inferior turbinates
working length: 103 mm

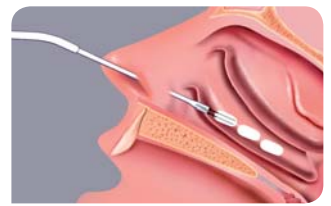
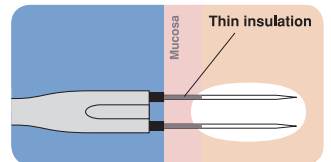


“RaVoR™ is a modern surgical technique showing good and long-lasting treatment results when used to reduce the volume of hypertrophic turbinates. At the same time it preserves the mucosa and its function.”

R. Romeo, MD
Rome (Italy)



Inferior turbinate – preoperative condition and six months post-operatively with significantly enlarged nasal passage.



Schematic view of the puncture sites for the application of radiofrequency energy of the hypertrophic turbinates.

Other products for the treatment in the nose



71 50 15
non-stick monopolar suction tube
Ø 3.3 mm, lumen 2.0 mm, working length: 13 cm

71 50 19
non-stick monopolar suction tube, malleable,
Ø 4.3 mm, lumen 3.0 mm, working length: 13 cm



36 08 17
Monopolar ball electrode
Ø 3 mm, total length: 60 mm

36 04 62
Monopolar ball electrode
Ø 4 mm, total length: 142 mm



78 21 81 SG
SuperGliss® non-stick bipolar forceps
bayonet, tips: 1.0 mm, total length: 20.0 cm
working length: 8.5 cm

single-use



70 44 95
RaVoR™ bipolar electrode
 for the soft palate, single-use
 working length: 110 mm



1:1

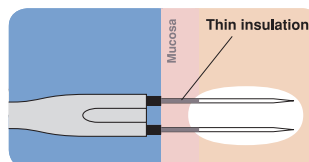
70 04 95
RaVoR™ bipolar electrode for the soft palate
 working length: 110 mm



Puncture sites for the application of radiofrequency energy in the soft palate.



Dissection of surplus uvula tissue and incision lines for the triangular excision of the posterior palatal pillars (with **ARROWtip™** monopolar microdissection electrode, REF: 36 03 42).



“The radiofrequency assisted soft palate procedure is a minimally invasive, safe and quick procedure. It is well tolerated by patients. We have not observed any bleeding that needed special attention.”

D. Brehmer, MD
 Göttingen (Germany)

Ideal product combination for RF surgery of the soft palate



36 03 42
ARROWtip™ monopolar microdissection electrode
 Ø 0.3 mm, 45° angled, total length: 107 mm



78 01 75 SG
SuperGliss® non-stick bipolar forceps
 straight, tips: 1.0 mm, 30° angled
 total length: 20.0 cm, working length: 6.0 cm



1:1

70 04 99
RaVoR™ bipolar electrode for the tongue base
working length: 97 mm

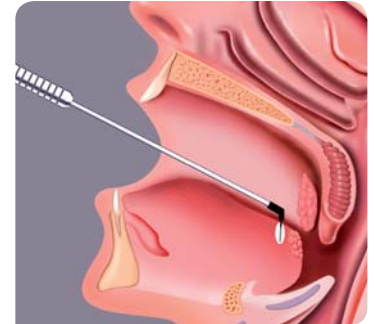
“In my clinical practice I successfully make use of the tongue base radio-frequency procedure. My experience shows that when using this minimally invasive method together with other surgical techniques, the outcome of sleep-related breathing disorder surgery can be improved. The treatment is useful and should be considered in the treatment of patients with tongue base collapse.”



M. A. Sarte, MD
Manila (Philippines)



Puncture sites for the treatment of the tongue base. Insert the RaVoR™ bipolar electrode with the thin insulation layer.



The low profile of the instrument and its strong shaft enable the surgeon to insert the bipolar electrode at the back of the tongue.

RaVoR™/ENT bipolar electrodes



1:1



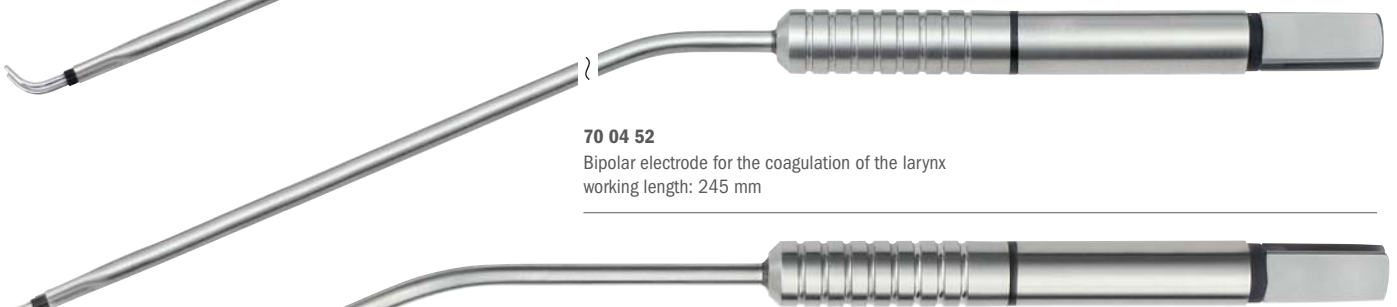
70 04 50
Bipolar electrode for the coagulation of the tonsils
working length: 97 mm

1:1



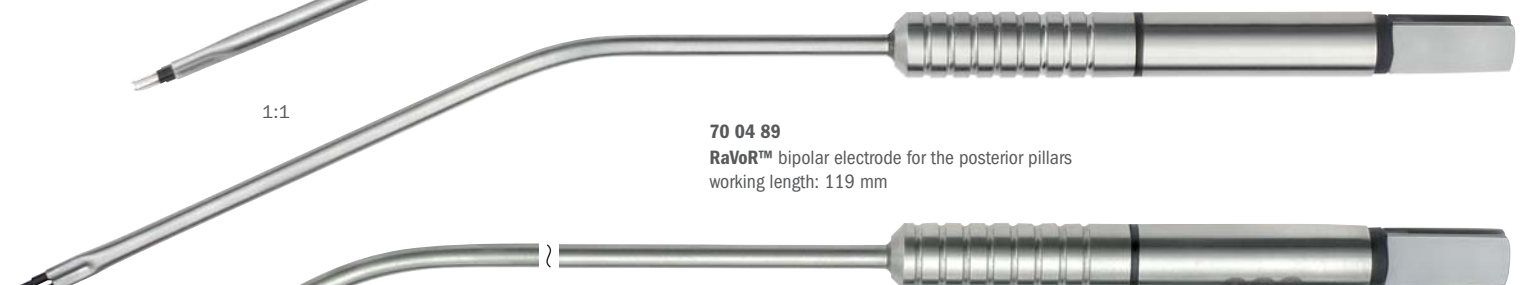
70 04 51
Bipolar electrode for the coagulation of the larynx
working length: 245 mm

1:1



70 04 52
Bipolar electrode for the coagulation of the larynx
working length: 245 mm

1:1



70 04 89
RaVoR™ bipolar electrode for the posterior pillars
working length: 119 mm

1:1



70 04 97
RaVoR™ bipolar electrode for the tongue base tonsils
working length: 142 mm



ARROWtip™ monopolar microdissection electrodes Basterra



36 03 71
straight, Ø 0.3 mm
total length: 236 mm



36 03 72
45° angled downw., Ø 0.3 mm
total length: 233 mm



36 03 73
90° angled downw., Ø 0.3 mm
total length: 231 mm



36 03 74
90° angled upw., Ø 0.3 mm
total length: 234 mm

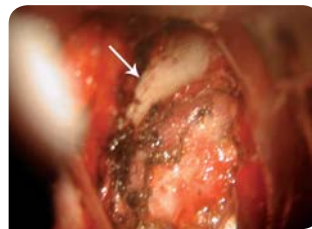


36 03 75
45° angled upw., Ø 0.3 mm
total length: 236 mm

“Compared to laser procedure, microelectrodes used with radiofrequency enhance the surgical technique by giving tactile feedback and other advantages. No special safety precautions are necessary and scarring is similar in both procedures. Made of super-hard tungsten and especially designed to reach every part of the laryngeal anatomy, micro-tips in different angles allow good access to the surgical field. We have operated on 92 tumors, mainly T1 glottic tumors, using the ARROWtip™ monopolar microdissection electrodes.”



J. Basterra, MD
Valencia (Spain)



Corpectomy type V.
Arrow indicates internal surface of thyroid cartilage



Endoscopic view of the operating field

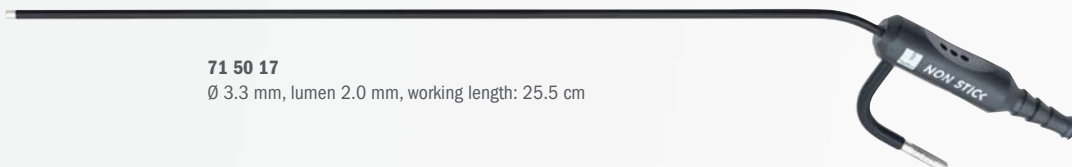
Other products for larynx surgery



70 09 47
Calvin® bipolar forceps
working length: 23 cm



70 09 46
Calvin® bipolar forceps with suction
working length: 23 cm



71 50 17
Ø 3.3 mm, lumen 2.0 mm, working length: 25.5 cm

Radiofrequency Tonsillotomy



“Tonsillotomy with radiofrequency is a safe and easy-to-learn procedure. Children with symptomatic tonsillar hyperplasia profit from it enormously. Compared to all other procedures for removing parts of or even all tonsillar tissue we prefer radiofrequency tonsillotomy for children with symptomatic tonsillar hyperplasia without chronic tonsillitis.”

R. Hirt, MD
Dessau (Germany)



The protruding part of the tonsil is cut along the incision line and parallel to the palatal pillar.



Surgical site during radiofrequency tonsillotomy

Radiofrequency Tonsillectomy



“The To-BiTE™ non-stick bipolar clamp combining four functions in one instrument is a safe and effective tool for performing tonsillectomies. Vis-à-vis the traditional approach, it seems to make tonsillectomies faster and easier.”

P. Tolsdorff, MD
Bad Honnef (Germany)



Dissection of the tonsillar tissue



Wound immediately after tonsillectomy

Radiofrequency in Endoscopic Ear Surgery



Endoscopic ear surgery is rapidly gaining interest. With one hand holding a camera, bleeding control and hemostasis can be a challenge. With the use of the Sutter ARROWtip™ monopolar microdissection electrodes bleeding can be significantly reduced from the outset, optimizing visibility and reducing operation time.

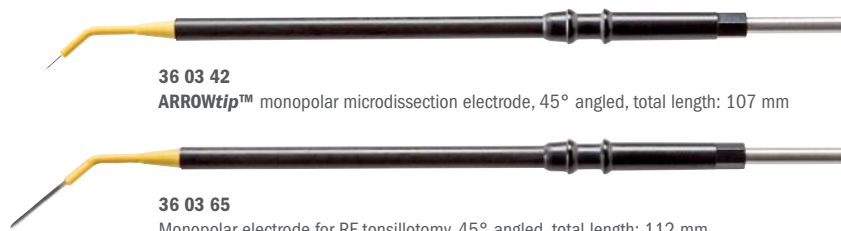
S. Geukens, MD
Aalst (Belgium)



Intraoperative picture showing outer ear canal with an ARROWtip™ monopolar microdissection electrode



Application of radiofrequency ablation at carefully selected points



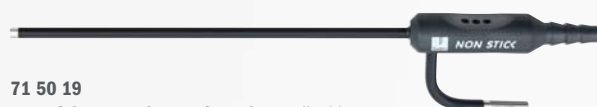
36 03 42
ARROWtip™ monopolar microdissection electrode, 45° angled, total length: 107 mm

36 03 65
Monopolar electrode for RF tonsillotomy, 45° angled, total length: 112 mm

Other products for tonsillotomy



78 01 75 SG
SuperGliss® non-stick bipolar forceps
straight, tips: 1.0 mm, 30° angled,
total length: 20.0 cm, working length: 6.0 cm



71 50 19
non-stick monopolar suction tube, malleable
Ø 4.3 mm, lumen 3.0 mm, working length: 13.0 cm

To-BiTE™ non-stick bipolar clamp



70 09 60 SG
To-BiTE™ non-stick
bipolar clamp
37 01 54R
Bipolar CURIS® cable for
To-BiTE™ non-stick/Calvian™ (not shown)

Other products for tonsillectomy



78 01 75 SG
SuperGliss® non-stick bipolar forceps
straight, tips: 1.0 mm, 30° angled
total length: 20.0 cm, working length: 6.0 cm



36 04 40
Monopolar blade electrode
total length: 68 mm

78 01 76 SG
SuperGliss® non-stick bipolar forceps
tips: 2.0 mm, 30° angled
total length: 20.0 cm, working length: 6.0 cm

ARROWtip™ monopolar microdissection electrode



36 03 43
ARROWtip™ monopolar microdissection electrode
55° angled, total length: 105 mm

Other products for endoscopic ear surgery



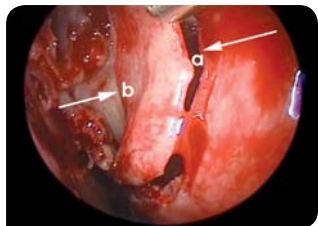
70 09 59
Calvian endo-pen® bipolar forceps
tips: 0.7 mm, 15° angled
total length: 23.0 cm, working length: 10.0 cm

Radiofrequency in Sinus Surgery



“Endoscopic endonasal sinus surgery demands subtle hemostasis and the precise cutting performance of the instruments employed. The disadvantages of “cold steel” can be levelled out favorably by the application of radiofrequency current through an angled probe.”

T. Kühnel, MD, Regensburg (Germany)



The uncinate process incised and lifted anteriorly. Arrow (a) indicates the incised anterior edge, arrow (b) indicates posterior margin.



Incision starting at the cranial attachment of right uncinate process utilizing ARROWtip™ monopolar microdissection electrode (REF: 36 03 42)



The posterior part of the uncinate process can be incised by means of the angled tip. No deterioration of the inferior turbinate.



Nearly bloodless incision at the anterior edge of the uncinate process.

Radiofrequency treatment of Epistaxis



“Blood vessels on the surface of the nasal mucosa are often the cause for recurrent nasal bleeding. Radiofrequency coagulation (RF coagulation) is a new method for the treatment of such vessels with the advantage of causing less thermal damage to the surrounding mucosa. Recurrent epistaxis predominantly occurs in Osler’s disease. Despite a broad armamentarium of treatment methods, successful therapy in this patient group is difficult to achieve. RF coagulation is an inexpensive alternative to laser treatment, and preliminary results are promising.”

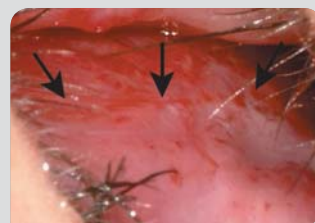
B. J. Folz, MD; C.-G. Konnerth, MD, Lippspringe (Germany)



Patient with Rendu-Osler-Weber syndrome, preoperative findings



Intraoperative view during radiofrequency treatment of nasal hereditary hemorrhagic telangiectasia



Result of radiofrequency treatment six months postoperatively

Radiofrequency in Oral and Oropharyngeal Tumor Surgery



“Radiofrequency excision of lesions in the oral cavities (tongue, tongue base, buccal mucosa, lips or base of the mouth) such as benign and malignant tumors as well as precancerous lesions is a gentle and very easy treatment which can be done under local anesthesia.”

S. Arndt, MD; E. Heinert, MD, Freiburg (Germany)



Sublingual papilloma on the right side



Reduced-bleeding excision of the papilloma with ARROWtip™ monopolar microdissection electrode (REF 36 03 22)



Postoperative site after precise and full tumor resection



36 03 42

ARROWtip™ monopolar microdissection electrode
45° angled, total length: 107 mm

Other products for sinus surgery

70 09 38

Calvian® duckbill+ bipolar forceps with suction
working length: 12 cm



70 09 39

Calvian® duckbill+ bipolar forceps with suction
working length: 12 cm



Monopolar Ball electrodes



1:1



36 08 17

Monopolar ball electrode, Ø 3.0 mm, total length: 60 mm



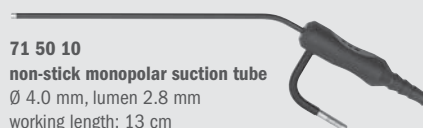
1:1



36 04 62

Monopolar ball electrode, Ø 4.0 mm, total length: 142 mm

Other products for epistaxis



71 50 10

non-stick monopolar suction tube
Ø 4.0 mm, lumen 2.8 mm
working length: 13 cm

ARROWtip™ monopolar microdissection electrodes



1:1



36 03 22

ARROWtip™ monopolar microdissection electrode
90° angled, total length: 52 mm

Other products for oral surgery



36 08 14

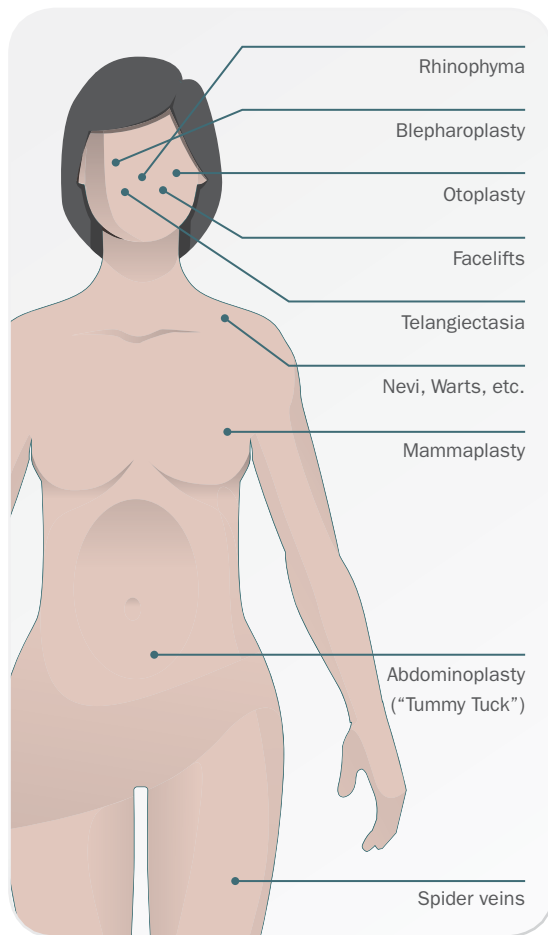
Monopolar loop electrode
Ø 5 mm, total length: 57 mm



78 01 75 SG

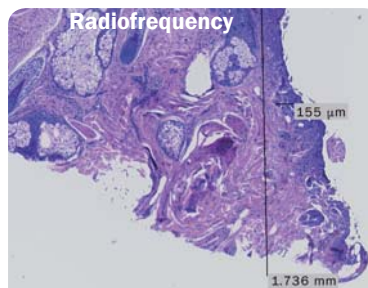
SuperGliss® non-stick bipolar forceps
straight, tips: 1.0 mm, 30° angled
total length: 20.0 cm, working length: 6.0 cm

Plastic and Aesthetic Surgery

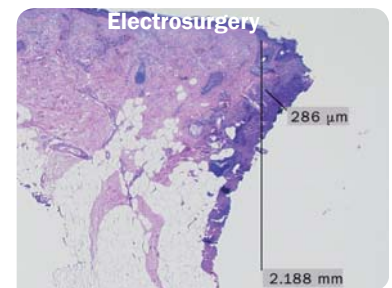


"Radiofrequency surgery causes less lateral tissue damage than conventional electrosurgery. Consequently faster wound healing and a better cosmetic outcome can be expected. Studies have even shown better cosmetic results for radiofrequency skin surgery than for CO₂ laser applications. Radiofrequency also improves operation comfort by enabling germ-free and pressure-free cuts with minimal bleeding in a very cost-effective way."

R. Kasten, MD
Mainz (Germany)



Lateral thermal damage following radiofrequency excision: 155 μm



Lateral thermal damage after conventional electrosurgery excision: 286 μm

Precise cutting allows the tissue to heal with minimal postoperative pain and scarring. The degree of hemostasis is determined by the surgeon. It goes without saying that the CURIS® 4MHz radiofrequency generator will produce clear, clean cuts. This only works when the energy delivered is highly focussed and there is minimal lateral heat damage. The frequency of 4 MHz and **AutoRF™** combine to create a homogenous electromagnetic field. For the unit to adjust to ever changing conditions during cutting skin, fat, muscle in one stroke, active performance control with **AutoRF™** is able to ensure reproducible results.

Best possible coagulation results can be achieved, according to the doctor's requirements, with two bipolar modes. For instruments with wider tips of 1 mm and more, the MACRO mode is ideal. The advantage of fine instruments – their precision – is enhanced by the PRECISE mode, which can be adjusted in steps of 0.5 watts. Its gentleness and characteristics guarantee safe coagulation results during subtle interventions and near sensitive structures.



Hemangioma on the upper arm



Excision of a hemangioma with minimal bleeding



Ø 1.0 mm

36 08 16
Monopolar ball electrode
 total length: 63 mm



Papular nevus on left cheek



Tangential excision of papular nevus

“The range of radiofrequency surgery has now been extended to ablative, vaporizing methods in esthetic medicine. This novel method complements the armamentarium of the dermatologist in the operating room as well as those of the plastic surgeon and ENT specialist. Elevated benign nevi may now be removed elegantly and painlessly producing excellent cosmetic results.”



R. Kasten, MD
 Mainz (Germany)



Removing the remaining part of the lesion with gentle movements



Eight weeks after radiofrequency ablation

Telangiectasia / Spider Veins



36 08 04
Monopolar needle electrode
 total length: 67 mm



Spider veins before RF treatment.

“With radiofrequency all types of spider veins can be treated in a fast and cost effective way. The procedure takes only several minutes and effects are instantly visible. Postoperatively there is very little discomfort for the patient.”



D. Zavisic, MD
 Freiburg (Germany)



Surgical site immediately postoperatively.



Ø 0.3 mm

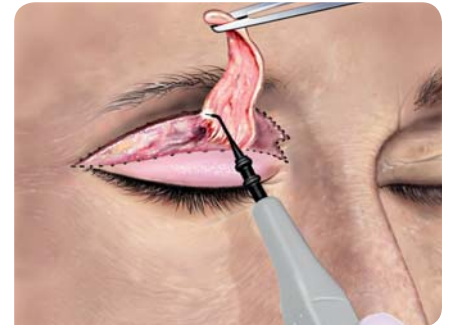
36 03 21
ARROWtip™ monopolar microdissection electrode
 45° angled, total length: 56 mm



78 01 48 SG
SuperGliss® non-stick bipolar forceps
 straight, tips: 0.7 mm, total length: 15.5 cm
 working length: 4.0 cm



Lower Eyelid Plastic Surgery: Skin incision using ARROWtip™ monopolar microdissection electrode (REF: 36 03 21)



Upper Eyelid Plastic Surgery: Skin incision and excision of the skin area using the ARROWtip™ monopolar microdissection electrode (REF: 36 03 21)

“An established technique for precise cutting and delicate coagulation in plastic and aesthetic surgery: Radiofrequency leads to less lateral tissue damage than conventional electro-surgery. This, in turn, results in improved wound healing and good cosmetic results. Radiofrequency increases the user-friendliness and comfort for the surgeon who is able to work in one uninterrupted go without applying mechanical pressure and with a lower bleeding tendency.”

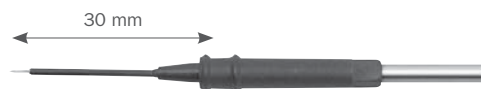


E. Oestreicher, MD
 Meppen (Germany)

ARROWtip™ monopolar microdissection electrodes for dermatology



20 mm
 Ø 0.3 mm **36 03 20**
ARROWtip™ monopolar microdissection electrode
 straight, total length: 57 mm



30 mm
 Ø 0.3 mm **36 03 25**
ARROWtip™ monopolar microdissection electrode
 straight, total length: 67 mm



Ø 0.3 mm **36 03 21**
ARROWtip™ monopolar microdissection electrode
 45° angled, total length: 56 mm



Ø 0.3 mm **36 03 28**
ARROWtip™ monopolar microdissection electrode
 45° angled, total length: 65 mm



Ø 0.3 mm **36 03 22**
ARROWtip™ monopolar microdissection electrode
 90° angled, total length: 52 mm

Sets/Accessories



CURIS® Basic Set

87 00 10 – CURIS® basic set with single-use patient plates

Qty.	REF	Description
1	36 01 00-01	CURIS® 4 MHz radiofrequency generator (incl. mains cord, user's manual and test protocol)
1	36 01 10	Foot switch two pedals for CURIS® (cut & coag), 4 m cable
1	37 01 54 L	Bipolar cable for CURIS®, length: 3 m
1	36 07 04	Monopolar handpiece (pencil) cut & coag, shaft 2.4 mm, cable 3 m
1	36 02 38	Cable for single-use patient plates, length: 3 m
1 (x 50)	36 02 22 H	Safety patient plates, single-use, packing 5 x 10 pcs. (not shown)

Optional set:

CURIS® basic set with reusable patient plate (REF 870020)

Instrument Sets for ENT

87 86 05 – RaVoR™ Set for Surgery

Qty.	REF	Description
2	70 04 62	RaVoR™ bipolar electrode for the inferior turbinates
1	70 04 95	RaVoR™ bipolar electrode for the soft palate
1	70 04 89	RaVoR™ bipolar electrode for the posterior pillars
2	36 03 28	ARROWtip™ monopolar microdissection electrode, working length: 30 mm, angled
2	36 03 42	ARROWtip™ monopolar microdissection electrode, working length: 65 mm, angled
1	80 00 00	Container with accessories (31 x 10 x 19 cm)
1	70 17 47	Instrument tray

87 00 05 – RaVoR™ Set for Hospital

Qty.	REF	Description
1	70 04 62	RaVoR™ bipolar electrode for the inferior turbinates
1	70 04 95	RaVoR™ bipolar electrode for the soft palate
1	70 04 89	RaVoR™ bipolar electrode for the posterior pillars
1	70 04 99	RaVoR™ bipolar electrode for the tongue base
2	36 03 28	ARROWtip™ monopolar microdissection electrode, working length: 30 mm, angled
2	36 03 42	ARROWtip™ monopolar microdissection electrode, working length: 65 mm, angled
1	80 00 00	Container with accessories (31 x 10 x 19 cm)
1	70 17 47	Instrument tray



CURIS® Storage / Transport



36 09 00
Fuego trolley

Fuego Trolley

The trolley has a solid design and guarantees that the CURIS® 4 MHz radiofrequency generator will not shift. It also comes with a hook to mount the footswitch.

Two storage baskets for accessories and documentation.



99 01 10
CURIS® trolley case

Trolley Case for CURIS® 4 MHz radiofrequency generator

The CURIS® trolley case is ideally suited to preserve your radiofrequency generator from damage.

*Not for shipment with parcel services.

CURIS® Technical Data

RF output max.	performance	operating frequency		
monopolar			Modulation frequency	33 kHz
CUT 1 (unmodulated)	100 W ± 20 % 600 Ω	4.0 MHz	Mains supply	100-240 V; 50/60 Hz
CUT 2 (modulated)	80 W ± 20 % 600 Ω	4.0 MHz	Measurements W x H x D	320 mm x 170 mm x 385 mm
CONTACT (Coag)	80 W ± 20 % 400 Ω	4.0 MHz	Weight	approx. 5.2 kg
SOFTSPRAY (Coag)	60 W ± 20 % 600 Ω	4.0 MHz	Mode of operation	Intermittent INT 10 s / 30 s equals 25 % ED
bipolar			Standards	DIN EN 60601-1; DIN EN 60601-2-2
BICUT 1	80 W ± 20 % 300 Ω	4.0 MHz	Safety class I	
BICUT 2	80 W ± 20 % 300 Ω	4.0 MHz	EMC (Interference suppr.)	EN 60601-1-2
EXCISE (Cut)	80 W ± 20 % 300 Ω	4.0 MHz	Type	CF (cardiac floating) defibrillation proof
MACRO (Coag)	80 W ± 20 % 50 Ω	4.0 MHz	German MPG class.	II b
PRECISE (Coag)	50 W ± 20 % 50 Ω	4.0 MHz	Quality assurance	EN 13485
RaVoR™	40 W ± 20 % 50 Ω	4.0 MHz		

Disclaimer:

The information presented herein has been carefully researched and compiled with the help of specialist physicians. They are not meant to serve as a detailed treatment guide. They do not replace the user instructions for the medical devices used. Sutter accepts no liability for the treatment results beyond the mandatory legal regulations.

The listed working lengths serve as a guideline and may be rounded up or down. The actual lengths may vary slightly.

Products shown in this catalog are subject to regulatory approval in individual markets. Products may therefore not be available in all markets.

CURIS® – Commonly used unit settings*

Indication	Instrument	Unit settings
Dermatology		
Syringoma	Blade electrode REF 36 04 40	CUT 1 5 - 15 watts
Spider Nevi, Couperosa,	ARROWtip™ monopolar microdissection electrodes REF 36 03 20, 36 03 21	CONTACT 5 - 8 watts
Telangiectasia, Spider Veins	Monopolar needle electrode REF 36 08 04	SOFTSPRAY 3 - 8 watts
Age Spots	Monopolar loop electrode REF 36 04 43	CUT 1 or SOFTSPRAY 12 - 18 watts
Birthmark	ARROWtip™ monopolar microdissection electrode REF 36 03 20	CUT 1 or CUT 2 20 - 25 watts
Warts, Fibrosis	Monopolar loop electrode REF 36 04 43	SOFTSPRAY 7 - 25 watts Cut 2: 10 - 25 watts
Neurofibroma	ARROWtip™ monopolar microdissection electrode REF 36 03 21	CUT 1 7 - 15 watts
Papular Melanocytic Nevi	Monopolar ball electrode REF 36 08 16	CONTACT 4 - 6 watts
Tongue lesions	ARROWtip™ monopolar microdissection electrode REF 36 03 42	CUT 1 10 - 18 watts
Plastic/Esthetic surgery		
Blepharoplasty for skin incision	ARROWtip™ monopolar microdissection electrodes REF 36 03 20, 36 03 21, 36 03 22, 36 03 25	CUT 2 10 - 20 watts
Blepharoplasty for coagulation	SuperGliss® non-stick bipolar forceps REF 78 01 48 SG	PRECISE 23 watts
Facelift for skin incision monopolar	ARROWtip™ monopolar microdissection electrodes REF 36 03 20, 36 03 21, 36 03 22, 36 03 25	CUT 1 10 - 18 watts
Facelift for coagulation bipolar	SuperGliss® non-stick bipolar forceps REF 78 01 52 SG OR 78 01 48 SG	PRECISE 15 - 25 watts OR 10 - 15 watts
Hand surgery for skin incision monopolar	ARROWtip™ monopolar microdissection electrode REF 36 03 20	CUT 1 or CUT 2 12 - 18 watts
Hand surgery for monopolar coagulation	Monopolar ball electrode REF 36 08 16	CONTACT 20 watts OR 5 - 7 watts for slow coagulation
Hand surgery for bipolar coagulation	SuperGliss® non-stick bipolar forceps REF 78 01 52 SG OR 78 02 38 SG	PRECISE 20 watts 15 - 25 watts
Breast surgery for skin incision monopolar	ARROWtip™ monopolar microdissection electrodes REF 36 03 20, 36 03 50	CUT 1 or CUT 2 7 - 15 watts
Breast surgery for bipolar coagulation	SuperGliss® non-stick bipolar forceps REF 78 01 51 SG OR 78 02 91 SG	PRECISE 15 - 25 watts
ENT		
RaVoR™ Inferior Turbinates	RaVoR™ bipolar electrode for the inferior turbinates REF 70 04 62	RaVoR™ (AUDIO FEEDBACK) 8 - 10 watts
RaVoR™ Soft Palate	RaVoR™ bipolar electrode for the soft palate REF 70 04 95	RaVoR™ (AUDIO FEEDBACK) 10 watts
RaVoR™ Tongue Base	RaVoR™ bipolar electrode for the tongue base REF 70 04 99	RaVoR™ (AUDIO FEEDBACK) 12 watts
UPPP	ARROWtip™ monopolar microdissection electrode REF 36 03 42	CUT 2 12 - 20 watts
Tonsillotomy	ARROWtip™ monopolar microdissection electrode REF 36 03 42 Monopolar electrode for RF tonsillotomy REF 36 03 65 SuperGliss® non-stick bipolar forceps REF 78 01 75 SG	CUT 2 20 - 25 watts PRECISE 15 - 30 watts
Tonsillectomy with To-BITE™	To-BITE™ non-stick bipolar clamp REF 70 09 60 SG	MACRO 30 - 40 watts
Laryngeal tumors	ARROWtip™ monopolar microdissection electrodes REF 36 03 71 - 35	CUT 2 5 - 25 watts
Epistaxis	Monopolar ball electrodes REF 36 08 17 OR 36 04 62	CONTACT 8 - 12 watt

Settings valid for generators from version: 0607

*Please see disclaimer on page 18. Values are recommendations only and may be changed at the discretion of the physician!



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