



## radioSURG<sup>®</sup> 2200

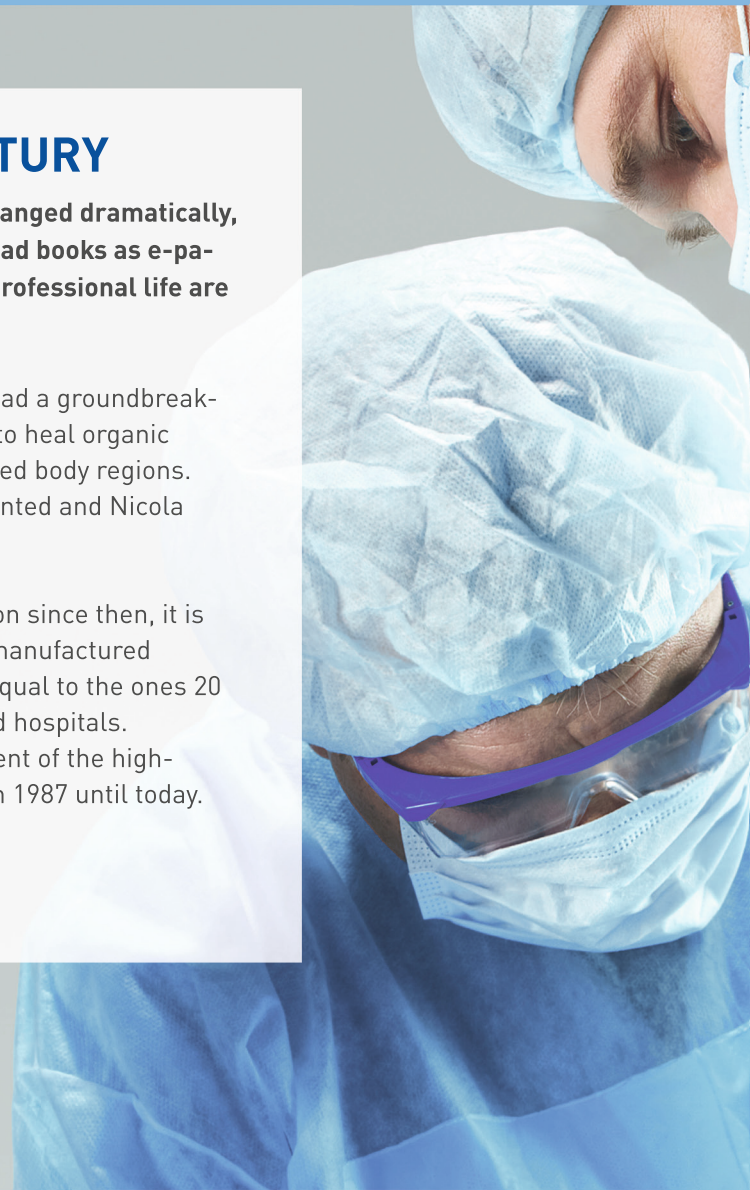
THE NEWEST GENERATION  
OF RADIOSURGICAL DEVICES

## RADIOSURGERY IN THE 21<sup>ST</sup> CENTURY

In the last 20 years not only our private environment has changed dramatically, but also the business one. We send messages via e-mail, read books as e-papers, but sometimes devices we use on a daily base in our professional life are far from the latest developments.

Already more than 120 years ago, the Croatian Nicola Tesla had a groundbreaking idea. The electrical engineer found out that it is possible to heal organic diseases by conducting electrical currents through the affected body regions. The treatment of humans with high frequent energy was invented and Nicola Tesla was heaped with prizes and honors internationally!

Although the devices have been constantly improved always on since then, it is still often believed that the high-frequency surgical devices manufactured nowadays and approved according to the strictest rules are equal to the ones 20 years ago, which are still in use in many private practices and hospitals. It can clearly be proved, that this is not true by the development of the high-frequency / radiosurgery devices of Meyer-Haake GmbH from 1987 until today.



1987



today

## THIS IS OFFERED BY OUR HIGH-FREQUENCY / RADIO SURGICAL DEVICES

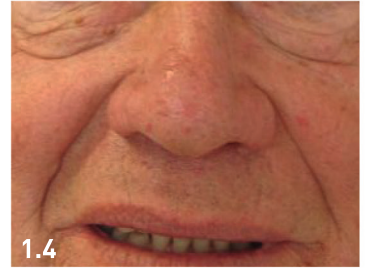
- Pressureless „cold“ incisions, which are so smooth that excisions can have a histopathological examination! \*\*
- High-frequency electrodes, which follow each surgical or anatomical line while cutting the tissue without pressure or production of necroses!
- Skin incisions, which can be perfectly performed without discoloration of the skin!
- Most gentle coagulation with adjustable coagulation degrees from 1 to 9 and adjustable coagulation duration from 0.05 to 1 second.
- Finest plastic surgeries with hemostasis which is adapted to each case.
- Hardly any hematomas! Therefore, patients are very fast socially presentable again e.g. after a blepharoplasty of the upper or lower eyelids!
- Automatic switch-off when reaching a specific impedance in the tissue.\*
- Touchless activation of the modes via hand pieces or multi-function foot pedal!\*
- An USB stick can be connected via an USB slot, which documents the course of the surgery in a LOG file in txt format. All information such as date, time, mode and parameter settings of the device as well as the duration of the usage is recorded.\*
- 45 surgical procedures of 8 medical fields are pre-set!\*
- Memory of the last settings used!
- In each mode the 5 individual settings can be saved!\*
- Wide range of accessories for each medical field.
- Anti-Aging treatment with radio waves. Because of the output power in the Megahertz range elastin and collagen are initiated to be rebuilt again.
- Detailed accompanying documents:
  - Instruction for use on CD, USB stick or on paper
  - DVD with many live recordings of surgeries
  - Recommended settings
  - Treatment methods
  - Reprint of professional articles
  - Accessories catalogue
  - and many others more!

\* Depending on the equipment of the device. \*\* Thermal tests confirm this statement.

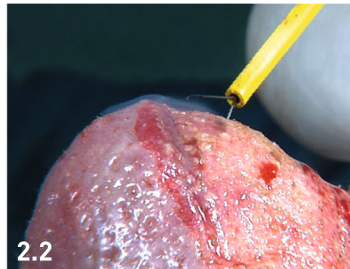
## SMOKE EVACUATION SYSTEM – SAFE PROTECTION IN THE OR FOR THE PATIENT, SURGEON AND STAFF

The silent smoke evacuation system **smokeSTAR** filters particles up to 0.01µm directly at the surgical area. Dangerous cancer-causing viruses, bacteria, fungi etc. can no longer harm your health. Because of the direct connection to the radio surgical device the suction starts automatically when the **radioSURG® 2200** is activated. Therefore, the filter duration of 35 hours can be fully utilized. Do you want to know more? We or your local distributor are pleased to send detailed information or do a demonstration in your practice/hospital.

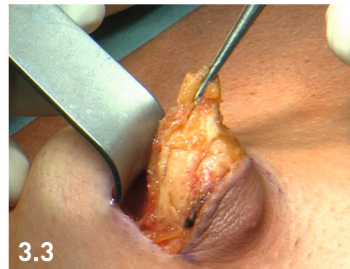
## VERSATILY APPLICATION OF RADIOSURGERY –



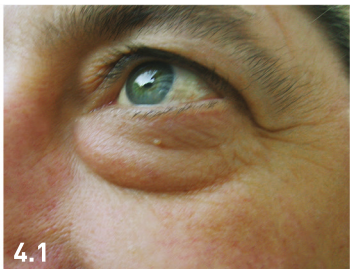
The **tumor** on the bridge of the nose was gently removed. The result after 4 weeks was very satisfying.



With the triangle electrode the **rhinophyma** was ablated in layers. 4 weeks post-operative a light redness was still visible, which disappeared after 7 weeks.



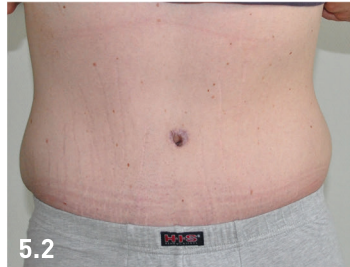
For the removal of the **gynecomastia** a perimamillary arc resection was performed and the excessive tissue removed. After the radio-surgical intervention the incision edges were not discolored or necrotic and the healing occurred without irritations.



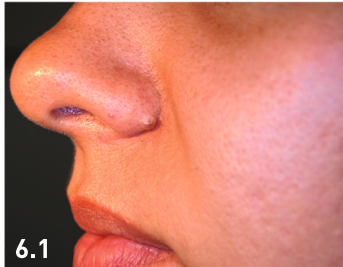
A punch led to a traumatic **rupture of the Septum Orbitale**. The fatty tissue was removed transconjunctivally. Only minor swelling occurred which totally disappeared after some days.

With the fine radiosurgical needle each anatomic or surgical incision line can be followed – even at the initial skin cut – without pressure!  
See figure 1-1. – 1.4

## WITH EXCELLENT RESULTS!



After weight reduction of approximately 50 kg an **abdominoplasty** was conducted at this young man. The patient was very satisfied with the result – here after 1 year.



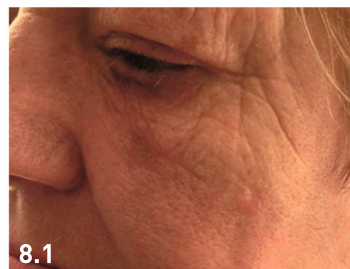
After removal of a **verruca vulgaris** on the nose the wound was treated with the Ethyl-2-Cyanoacrylate adhesive **EPIGLU®**. Already after some days the healing process of the wound was completed.



After an **upper eyelid blepharoplasty** the patient was approached several times because of her youthful appearance. No one suspected a surgery.

Due to the output mode „cutting with simultaneous coagulation and adjustable coagulation degree“ which is offered in all devices with cutting availability, initial cuts with gentle hemostasis are achieved. Excisions can have a histo-pathological examination and undesired hematomas, especially at blepharoplasties, can be avoided to the greatest possible extent. Already after some days the patients are socially presentable again.

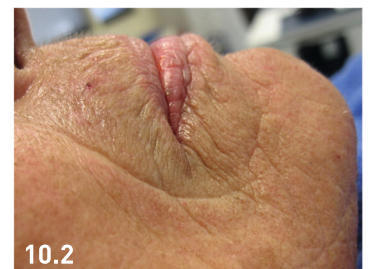
**Thermo tightening** and **RF-ReFacing®** are two Anti-Aging treatment methods which can be successfully performed with the **radioSURG® 2200**.



A **lower eyelid thermal tightening** was conducted at this patient. In figure 8.3, which shows another patient in this treatment, it is clearly visible that immediately after the treatment a reddening occurs, which disappears some weeks after the treatment.



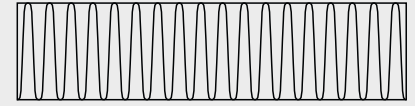
In this patient the **peri-oral wrinkles** were significantly reduced by the radio wave treatment.



This 74 year old patient had a severely damaged skin appearance due to high cortisone intake. She was treated once a week for 10 times with the Anti-Aging method **RF-ReFacing®**. The fresher skin texture and minimized wrinkles are clearly visible.

## WHAT IS RADIOSURGERY?

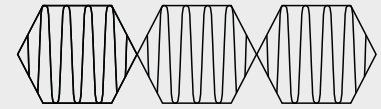
In radiosurgery, high-frequency energy in the Megahertz range is used for cutting, cutting with simultaneous coagulation, mono- and bipolar coagulation..



Cutting wave

## HOW IS THE CUTTING EFFECT CREATED?

In the device 2,200,000 cycles of waves are generated in one second. Once the contact between the electrode and tissue is made, the cells warm up, expand, burst and evaporate. The faster this happens, the gentler it is for the tissue, which neither shrinks nor becomes necrotic. Excisions can be examined histo-pathologically! Devices with an output power in the Megahertz range can comply with these criteria. Cuts are absolutely comparable to the ones with a scalpel!



Cutting and coagulation wave (blend)

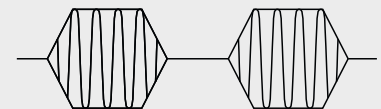
For the perfect cut with simultaneous coagulation

## HOW IS COAGULATION CREATED?

Two types of currents are available for coagulation

- monopolar coagulation
- bipolar coagulation

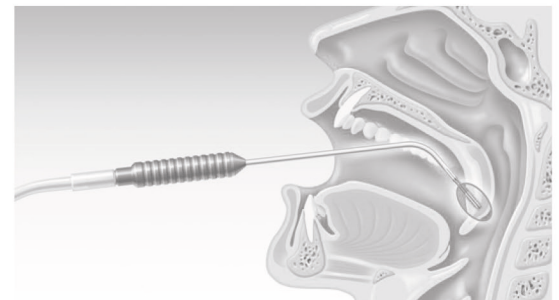
In both cases, heat is applied to the bleeding vessel, the clotting of protein - the hemostasis effect - takes place at about 45 ° C.



Coagulation wave

## WHY AUTOMATIC SWITCH-OFF?

An automatic switch-off is available for use in the field of ENT. When a certain impedance is reached, the device switches itself off automatically. Gentle **uvulopalato treatments** can be successfully performed, as well as **reduction of the turbinates, treatment of the lingual tonsils** and **soft palate**. The patients are enthusiastic about the success and the painless treatment.



## MEDIA CENTER

In our media center many videos with live recordings of surgeries with the radio wave technology are available to the professional audience. As we are only allowed to provide live surgical recordings to the professional audience, we ask for your understanding that we can only activate them after a check. Please contact us at [export@meyer-haake.com](mailto:export@meyer-haake.com). After successful verification of your data, we will immediately send you your access. Your information will not be stored by us and will not be made available to third parties.

On request, we can of course send you the videos as a DVD or USB stick. You can order these from us by e-mail at [export@meyer-haake.com](mailto:export@meyer-haake.com) or fax +49 (0) 6002 99270-22.

## HIGH-FREQUENCY / RADIOSURGICAL DEVICES PRODUCT OVERVIEW

### radioSURG® 2200 „M“



**The monopolar device – the economic alternative for all private practices where only minor procedures are performed that do not require bipolar coagulation.**

- Monopolar cutting
- Monopolar cutting with simultaneous coagulation
- Monopolar coagulation – also via monopolar forceps
- Adjustable coagulation degree, adjustable coagulation duration
- Memory of the last settings used
- Hand piece or foot pedal operation without device conversion
- Switching to the desired output mode by pressing the buttons at the hand pieces

### radioSURG® 2200 „TP“



**The universal device for all minor and major surgeries, making the scalpel superfluous. For all medical fields needing a bipolar coagulation.**

- Monopolar cutting
- Monopolar cutting with simultaneous coagulation
- Monopolar coagulation – also via monopolar forceps
- Bipolar coagulation
- Adjustable coagulation degree, adjustable coagulation duration
- Memory of the last settings used
- Hand piece or foot pedal operation without device conversion
- Switching to the desired output mode by pressing the buttons at the hand pieces or squeezing the tips of the bipolar forceps together

### radioSURG® 2200 „TPA“

ENT version with automatic switch-off

**Same as model „TP“, but additionally with automatic switch-off for use in ENT in the reduction of the nasal turbinate volume, tightening of the soft palate or treatment of the lingual tonsils. Upon reaching a certain resistance in the tissue, the device switches-off automatically.**

### radioSURG® 2200 „PT“



Multi-function foot pedal

**The sensational new development in the field of radiosurgery: touchscreen, 45 pre-set surgical parameters from 8 medical fields, records as .txt file on USB stick with all surgical parameters including, date and surgery duration.**

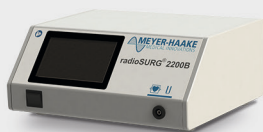
- Monopolar cutting
- Monopolar cutting with simultaneous coagulation
- Monopolar coagulation – also via monopolar forceps
- Bipolar coagulation
- Adjustable coagulation degree, adjustable coagulation duration
- Memory of the last settings used
- 25 individual settings can be saved
- Hand piece or foot pedal operation without device conversion
- Switching to the desired output mode by pressing the buttons at the hand pieces or squeezing the tips of the bipolar forceps together or directly via the multi-function foot pedal

### radioSURG® 2200 „PTA“

ENT version with automatic switch-off

**Same as model „PT“, but additionally with automatic switch-off for use in ENT in the reduction of the nasal turbinate volume, tightening of the soft palate or treatment of the lingual tonsils. Upon reaching a certain resistance in the tissue, the device switches-off automatically.**

### radioSURG® 2200 „B“



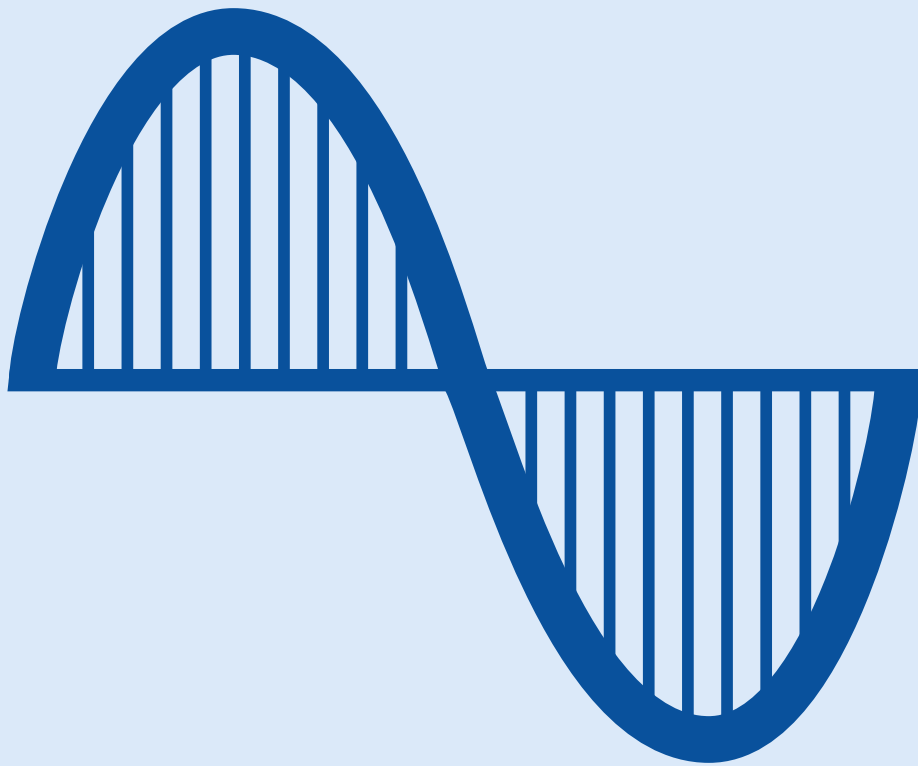
**The small, compact radioSURG® 2200 „B“ with touch screen and the output of the large models was developed exclusively for bipolar coagulation. The device will soon be indispensable in any ENT practice, emergency room and ambulance. In seconds, large and small bleeding can be stopped and wounds been treated. This eliminates stress and allows more patients to be treated quickly.**

- Bipolar coagulation with adjustable coagulation and adjustable coagulation duration.

## TECHNICAL DETAILS AND APPLICATIONS

Maximum output power 2.2 MHz and 120 watt | Cutting modes with adjustable coagulation degree | Coagulation and bipolar coagulation additionally with impulse coagulation | All devices are equipped with an trigger out for the connection of a smoke evacuation system and the for the OR mandatory potential equalizer | All devices are equipped in the cutting mode for the Anti-Aging treatment RF-ReFacing® | No necrosis even at an initial skin cut | Hardly any hematomas due to adjustable coagulation degree | Excision can have a histo-pathological examination and many others more. Do you like to have a demonstration of the device or ask us to accompany you in the OR!





**Manufacturer:**



Meyer-Haake GmbH  
Medical Innovations  
Daimlerstrasse 4  
61239 Ober-Moerlen • Germany

+49 (0) 6002-99270-0  
+49 (0) 6002-99270-22  
export@meyer-haake.com  
www.meyer-haake.com

**Distributor:**



**De Ceunynck**  
OPHTHALMOLOGY

[www.dc-ophthalmology.com](http://www.dc-ophthalmology.com)