

spirit of excellence



HF Energy—Simplified.



One generator—for use across multiple disciplines.

The HF-GENERATOR 2260 from Richard Wolf can be used across a wide range of surgical disciplines and has been specially developed for use in combination with existing Richard Wolf instrumentation in the fields of urology, general surgery, and gynecology.

Defined application parameters deliver precisely coordinated energy performance, allowing users to achieve exceptional results for harmonized usage with their existing Richard Wolf surgical instrumentation.









For endourological treatment of benign prostatic hyperplasia (BPH)



Various endourological procedures can be used for treating benign prostatic hyperplasia (BPH). According to the American Urological Association (AUA) guidelines, transurethral resection of the prostate (TURP) is the gold standard when it comes to surgical treatment of benign prostatic hyperplasia (BPH). ¹ In recent years, however, endoscopic enucleation of the prostate (EEP) has increasingly become established as a more patient-friendly method.

Monopolar TURP

In the standard version of TURP, monopolar current flows from the resection loop through the prostate tissue to the neutral electrode which is attached to the patient's body with a grounding pad. An electrically conductive irrigation solution must be used when carrying out resection with monopolar current. The preset for monopolar TURP on the HF-GENERATOR 2260 is intended to ensure excellent cutting results when resecting the prostate tissue.

Bipolar TURP

Bipolar TURP represents a technological step forward compared to conventional monopolar TURP. The solution required for bipolar TURP is a 0.9% saline (i.e. NaCl solution) that is an electrically conductive irrigation medium. The current circuit is closed via the loop and the branches of the electrode, which means that the current does not flow through the patient's body. Additionally, for bipolar TURP, a plasma bubble forms on the electrode loop which enables ablation of the prostate tissue. The preset for bipolar TURP on the HF-GENERATOR 2260 features instant ignition and cutting behavior from the electrode. The plasma bubble forms on the electrode loop even without direct tissue contact and ensures excellent resection, vaporization, and coagulation of the prostate tissue.



Bipolar enucleation

Particularly in the case of larger prostates, endoscopic enucleation of the prostate (EEP) is proving to be a more patient-friendly method than standard TURP and is becoming increasingly established around the world. Holmium and thulium laser enucleation (HoLEP & ThuLEP) are most commonly used with this type of procedure. Bipolar enucleation (bipolEP) is a cost-efficient alternative to laser therapy. The HF-GENERATOR 2260 provides a specially coordinated preset for bipolEP and ensures excellent performance when used on tissue, particularly in combination with the bipolar enucleation electrode from Richard Wolf.

Further presets for treating BPH:

- Monopolar coagulation
- Bipolar coagulation
- Bipolar vaporization



Management of Lower Urinary Tract Symptoms Attributed to BPH:
AUA Guideline; 2023.



Excellent cutting characteristics, especially with the monopolar and bipolar electrodes from Richard Wolf



Bipolar enucleation electrode for endoscopic



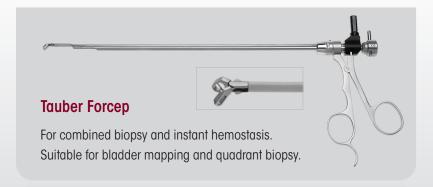
For transurethral resection of bladder tissue



Transurethral resection of bladder tumors (TURBT) is a diagnostic and therapeutic method for sampling and resection of bladder tissue. In the case of classic TURBT, the malignant tissue is resected in layers, i.e., in a fractionated manner. During this process, however, thermal damage to the individual tissue fragments can impair the quality for the histopathological diagnosis of the specimens.

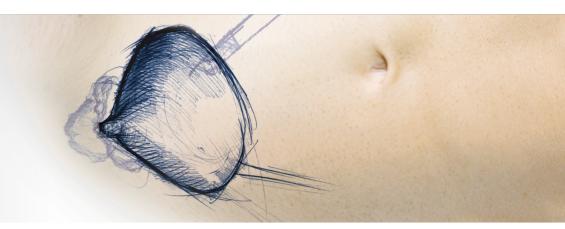
Monopolar TURBT

From a technical perspective, monopolar TURBT works in the same way as monopolar TURP. The preset for monopolar TURBT on the HF-GENERATOR 2260 is ideal for precision cutting performance and ensures effective resection and coagulation of the tissue.



Bipolar TURBT

This method increases patient safety as the emitted current does not flow through the entire body. In the case of bipolar TURBT, a plasma bubble forms on the electrode loop which enables resection of the bladder tumor. The preset for bipolar TURBT on the HF-GENERATOR 2260 ensures that the plasma bubble forms quickly on the electrode tip even without direct tissue contact. It is essential that the electrode delivers effective and precise ignition and cutting characteristics for sampling and treatment of a bladder tumor, particularly when it comes to the resection of surface tissue and marking of the tumor edges.

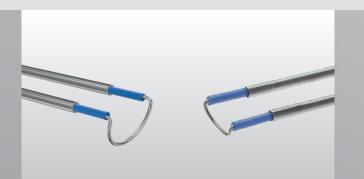


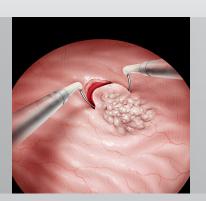
Bipolar en bloc resection

The aim of en bloc resection (EBR) is to remove the bladder tumor in one piece. With classic TURBT, it is specifically the fractionated manner in which the tumor is removed that presents certain disadvantages—the individual tumor fragments make it impossible to carry out an exact pathological assessment of the free resection margins and prevent spatial mapping of the specimen. The horizontal and vertical resection margins and the general invasion depth are a key indicator for the quality and completeness of a resection. Richard Wolf provides a particularly thin cutting electrode and a special oval cutting electrode for ERB which both—in combination with the preset for bipolar TURBT on the HF-GENERATOR 2260—ensures excellent tumor resection.









Left: cutting electrode Right: oval cutting electrode for en bloc resection

For laparoscopy

CUOLF

HF-GENERATOR 2260

For hysteroscopic resection



In combining the HF-GENERATOR 2260 with our expansive portfolio of general surgery solutions, Richard Wolf is able to provide enhanced procedural versatility during laparoscopic surgery through the use of modern HF surgical techniques.



ER GON

Richard Wolf's HF-GENERATOR 2260 pairs with the Princess Resectoscope for precise resectoscopic treatment of abnormal uterine pathology. With both bipolar and monopolar applications as well as a wide array of tissue effects, the HF-GENERATOR 2260 allows users to harness the benefits of hysteroscopic resection in their resectoscopic treatment of abnormal uterine pathology.



Monopolar and bipolar applications

The HF-GENERATOR 2260 aims to elevate the performance of Richard Wolf's laparoscopic instrumentation to the highest level possible. User presets for laparoscopic surgery have been precisely optimized for use with the ERAGON family of instrumentation, providing peak performance in both monopolar and bipolar surgical applications.

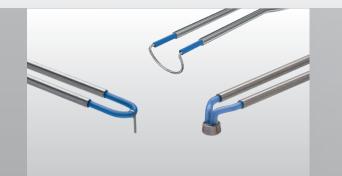
Bipolar resection and coagulation

The HF-GENERATOR 2260 has been tailored specifically for use with Richard Wolf's Princess Resection System, enabling precise hysteroscopic bipolar resection and coagulation. Bipolar energy can increase patient safety during hysteroscopic procedures, as it allows for the use of electrolytic solution as the distention media—increasing the deficit allowance and decreasing the risk of hyponatremia.¹ Furthermore, as compared to monopolar energy, emitted bipolar HF current is contained between the electrode tips, helping to decrease thermal spread.²

Bipolar vaporization

Bipolar vaporization is based on the principle of standard bipolar resection and is enabled through pairing the Princess Resectoscope and BiVAP electrode. The shape of the BiVAP electrode was intricately designed to leave a smooth path as compared to conventional roller ball electrodes. When paired with the HF-GENERATOR 2260, refined vaporization performance may be achieved.







- 1. Umranikar S, Clark TJ, Saridogan E, Miligkos D, Arambage K, Torbe E, Campo R, Di Spiezio Sardo A, Tanos V, Grimbizis G; British Society for Gynaecological Endoscopy /European Society for Gynaecological Endoscopy Guideline Development Group for Management of Fluid Distension Media in Operative Hysteroscopy. BSGE/ESGE guideline on management of fluid distension media in operative hysteroscopy. Gynaecol Surg. 2016;13(4):289-303. doi: 10.1007/s10397-016-0983-z. Epub 2016 Oct 6. PMID: 28003797; PMCID: PMC5133285.
- 2. Hefermehl LJ, Largo RA, Hermanns T, Poyet C, Sulser T, Eberli D. Lateral temperature spread of monopolar, bipolar and ultrasonic instruments for robot-assisted laparoscopic surgery. BJU Int. 2014 Aug;114(2):245-52. doi: 10.1111/bju.12498. Epub 2014 Jan 22. PMID: 24127773.



At-A-Glance



The HF-GENERATOR 2260 provides:

Performance

A combination of procedural user presets along with precise voltage and power outputs allow for optimal performance when paired with Richard Wolf instrumentation.

Procedural versatility

With applications spanning across multiple disciplines, including urology, general surgery, and gynecology—various procedural techniques may be achieved via one generator.

Safety

The HF-GENERATOR 2260 was designed with integrated safety mechanisms that prevent the maximum permissible voltage from being exceeded with the connected HF instrument based on the chosen mode.

Convenient operation with footswitch and toggle function

The two-pedal footswitch with toggle function allows the user to seamlessly switch between separate applications or user profiles.

User-friendly operation

RFID detection and preset parameters allow users to operate the generator in an intuitive manner.



Technical Data			
Cutting power	max. 400 watts		
Coagulation power	max. 250 watts		
Activation tone signal level	45–60 dB (A), adjustable		
Type of controls on housing front	Touch panel		
Frequency	50/60 Hz		
Power connection voltage	100–240 V		
Medical device class according to 93/42/EEC	IIb		
Current rating	6.3 A		
Maximum power rating	650 VA		
Dimensions (W x H x D)	300 x 159 x 419 mm		
Weight	10.2 kg		

Ordering information



HF surgical generator 400 kHz

for the connection of monopolar and bipolar accessories, (Richard Wolf, BOWA, KLS Martin, Olympus, Karl Storz,

....2260003

HF surgical generator 400 kHz bundle

includes:

HF surgical generator 400 kHz (2260003), footswitch, 2 pedals, L 5 m (2260021), power cable, L 8 ft (N710171)... 22600035

Footswitch, 2 pedals, L 5 m,

Bipolar HF Connecting Cables				
Instrument connector	Device connector	Product No.	Length	
ACQU	- Dans	8108.032	3 m	
		8108.0	8108.033	3 m
		8108.053	5 m	
ADDJ -		8108.133	3 m	
		8108233	3 m	
	8108253	5 m		

Monopolar HF Connecting Cables				
Instrument connector	Device connector	Product No.	Length	
ROOLE		815.033	3 m	
	815.053	5 m		
N. BIDLE		8106.033	3 m	
		8106.053	5 m	



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