

# The Revolution in TUR Bipolar Resectoscope Systems from KARL STORZ



## The Revolution in TUR

## Bipolar Resectoscope Systems from KARL STORZ

Although technical progress has been made in recent years in the various non-ablative treatment options, transurethral resection (TUR) remains the gold standard in the treatment of benign prostate hyperplasia (BPH) and in the resection of bladder tumors.

Unipolar resection can still be regarded as the standard in TUR, but bipolar resection has also been developed in recent years.

The new Bipolar Resectoscope System from KARL STORZ sets new standards in TUR in terms of effectiveness, patient safety, and system reliability. It thereby revolutionizes the treatment of BPH and bladder tumors.

Real bipolar system: Current not returned via the sheath

**Maximum efficiency with minimal, controlled current flow:** Minimal tissue penetration, significantly reduced obturator nerve stimulation

#### Precise cutting:

Thanks to precise centralization of the required current and free choice of loop diameter

**Excellent initial cut:** Due to automatic HF current regulation

Efficient coagulation: Reduced carbonization, no damage to surrounding tissue

Improved visual orientation: Reduced bleeding thanks to optimal coagulation

Additional technique: Bipolar vaporization

Self-cleaning loops: Due to plasma formation

Use of saline solution: Reduced risk of TUR syndrome, reduced time limitations during surgery





## Physician Opinions on the KARL STORZ Bipolar Resectoscope System

In bipolar TURB, the sharp cuts prevent tissue retraction. With the hook electrode, bladder tumors can be easily turned and completely removed together with the bladder wall (better staging).

In Bipolar TURP, even for large prostates, no carbonization was observed. In addition, the resectoscope does not need to be removed to clean the loop, which saves time.

Bipolar techniques result in better quality tissue samples because they are free of extensive coagulation or burnt edges, thereby enabling easier and more precise staging of superficial bladder tumors.

In bipolar systems, we observed less bleeding, fewer clots, and, as a result, better viewing conditions.

#### Conclusion

No learning curve, shorter operating time, less expensive irrigation solutions, reduced medical risk, and the possibility of treating patients on anticoagulants are only a few of the advantages of using bipolar TUR in all TUR procedures. Bipolar instruments ideally complement monopolar resectoscopes.

Prof. Pierre Conort, Department of Urology and Renal Transplantation, Groupe Hospitalier Pitié-Salpêtrière, Paris

Everyone agrees that the initial cut in TURP corresponds to that in monopolar resection, and the loop remains free of tissue remnants thanks to the arc created by the loop in the bipolar ionized medium (quasi-plasma). As a result, the resection characteristics of the bipolar system are even better in some respects. In bladder resection, this is particularly noticeable and important for the histological preparations. Even the smallest biopsies can be precisely harvested without coagulation of the resected tissue, which is common in monopolar resection.

In addition to this advantage, all resections are performed in isotonic NaCl solution, thereby eliminating the risk of TUR syndrome, the risk of complications resulting from unexpected obturator reflex is much reduced, and patients with pacemakers can be treated without disabling the device. Together, these advantages render this system the ideal resection system with extensive safety buffer, which is desirable in the training of residents as well as in daily clinical practice.

#### Conclusion

While previous experiences with other bipolar resection systems (old bipolar system [KARL STORZ], TuRis [Olympus], Gryus [ACMI]) did not convince us to change our resection approach, the new KARL STORZ bipolar system features such impressive intraoperative handling and cutting and coagulation behavior that bipolar resection has become our standard procedure for specialists and senior physicians as well as in the training of residents and fellows.

Dr. med Thomas RW Herrmann, Department of Urology and Uro-Oncology, Medizinische Hochschule Hannover (MHH)



## Bipolar Resectoscope System from KARL STORZ – Real Bipolar!

A bipolar resectoscope system consists of two electrodes, isolated from each other, connected to the same support and close together, so constructed that, when energized, the HF current flows mainly between these electrodes.



#### **Extremely Safe**

Active and return electrode are totally insulated against all conductive components of the resectoscope and therefore also primarily insulated against the urethra.

The current flow through the patient's tissue is kept to a minimum.



#### **Convenient and Economical**

To convert an existing unipolar resectoscope system to a bipolar system, just exchange the working element, the respective loop and the connecting cable. Sheath, telescope and HF generator can be retained.



## HF-Generator AUTOCON® II 400

- Automatic HF current regulation: maximum efficiency with minimal current
- New resection mode (Saline C-Cut ++ / Saline Coag ++) for optimal resection in saline solution
- Many treatment options, e.g., unipolar/bipolar resection, laparoscopic, and even open surgery
- Touch screen technology

## **Bipolar Cutting Loops from KARL STORZ**

The wide range of loops for the bipolar resectoscopes from KARL STORZ allows individual instrument configurations tailored to the operative situation as well as to the surgeon's personal preferences for best operative results. The KARL STORZ product portfolio includes loops for the urethra, prostate and bladder. They can be used for cutting, coagulation and for vaporization.



### Fast and Economic Resection

- Excellent initial cut without delay due to automatic HF current regulation
- Precise cut in all situations, due to selective choice of different loop diameters dedicated cutting loops for the bladder, color-coded
- Accurate and effective coagulation
- Additional ceramic insulation for durability and steady performance
- Reusable and cost-effective
- Self-cleaning loops due to plasma effect



# New Ball Electrode for the Efficient Vaporization of the Prostate

- Special design of the active electrode allows an extensive and fast vaporization with smooth, uniform movements across the prostate tissue
- Bifunctional for vaporization and coagulation
- Excellent hemostasis
- Cost-effective and time-saving alternative to Greenlight-Laser vaporization
- Improved vision during vaporization due to reduced bubble formation

Additional special loop variants, e.g. for resection on the posterior wall of the bladder or for incision of the bladder neck, ensure no compromises need to be taken when working even under difficult anatomic conditions.

## KARL STORZ Bipolar Resectoscope



**HOPKINS®** II Forward-Oblique Telescope 30°, enlarged view, diameter 4 mm, length 30 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red

HOPKINS<sup>®</sup> II Telescope 12°, enlarged view, diameter 4 mm, length 30 cm, **autoclavable**, fiber optic light transmission incorporated, color code: black



including:

- 1 Working Element
- 2 Cutting Loops, bipolar
- 2 Coagulation Electrodes, bipolar
- 1 High Frequency Cord
- **1 Protection Tube**



- 27050 SC **Resectoscope Sheath,** including connecting tubes for in- and outflow, 26 Fr., oblique beak, rotating inner sheath with ceramic insulation, quick-release lock, color code: yellow
- 27050 SL **Resectoscope Sheath,** including connecting tubes for in- and outflow, 26 Fr., oblique beak, rotating inner tube with ceramic insulation, color code: yellow
- 27241 BO **Resectoscope Sheath,** with central valve, including connecting tubes for in- and outflow, 24 Fr., oblique beak, with Standard Obturator 27040 OC, color code: yellow



27040 OC **Standard Obturator,** for 24/26 Fr. Sheaths, 27040 BO, 27241 BO, 27240 BO, 27040 SD/SL, 27050 SL, color code: yellow

## **Electrodes**

#### Two-Stem Electrodes with Stabilizers, for Working Elements 27040 DB/EB

For use with 24/26 Fr. resectoscope sheaths

The cutting loops are delivered with a wire diameter of 0.35 mm. Loops with 30 as the last digit of the order number indicate a wire diameter of 0.30 mm.



Distal Tip	24/26 Fr. color code: yellow	Instrument Description	Bladder	Prostate
	27040 GP1	Cutting Loop, bipolar	۲	٥
ç	27040 GD1	<b>Cutting Loop,</b> bipolar, small	٥	٥
	27040 BL1	Cutting Loop, bipolar, pointed	0	٥

Special Bladder Cutting Loops

Distal Tip	24/26 Fr. color code: yellow/orange	Instrument Description	Bladder	Prostate
Ç 📄	27040 GP130	<b>Cutting Loop,</b> bipolar, diameter 0.30 mm	۲	-
3	27040 JB1	Cutting Loop, bipolar, longitudinal	۲	-
	27040 JB130	<b>Cutting Loop,</b> bipolar, longitudinal, diameter 0.30 mm	٥	-

Vaporization Electrodes

280

Distal Tip	24/26 Fr. color code: yellow	Instrument Description	Bladder	Prostate
~	27040 NB	HALF MOON <sup>®</sup> Vaporization Electrode, bipolar, ball-shaped	٥	۰



**Protection Tube,** for sterilization and storage of electrodes, loops, curettes and knives

## AUTOCON® II 400 SCB

#### **High Frequency Surgery Unit**



 20 5352 02-125 AUTOCON® II 400 SCB, High-End Set, with additional resection module, power supply 220 – 240 VAC, 50/60 Hz including: Mains Cord SCB Connecting Cable, length 100 cm
 20 5352 02U125 AUTOCON® II 400 SCB, High-End Set, with additional resection module, power supply 100 – 120 VAC, 50/60 Hz

> including: Mains Cord SCB Connecting Cable, length 100 cm

It is recommended to check the suitability of the product for the intended procedure prior to use.

#### Consent to receive electronic information

Yes, I agree to receive future information by email at the following address:

Email	Name
Department / Practice	Street address
ZIP, Town	Signature
I agree to my data being stored at KARL STORZ for at info@karlstorz.com. KARL STORZ will not make	this purpose. I can withdraw my consent at any time and without giving reasons by emailing KARL STORZ nese data available to third parties.



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