

## LIGATION with TissueSeal® PLUS – simply precise

Rely on an established technique for permanent vessel and tissue sealing: LIGATION. And on a simple, yet precise instrument for open surgical applications: TissueSeal PLUS. Optimum surgery results because of excellent ergonomics and tactility will enthuse surgeons, while cost reductions and improved efficiency will please the strictest controller.

Alongside the advantage of preventing the introduction of foreign bodies into the patient, you will also save theatre time, suture materials and clips. TissueSeal PLUS is an autoclavable BOWA LIGATION instrument and closes large-lumen veins, arteries and tissue bundles with up to 7 mm diameter quickly, safely and permanently. The sealing safety of up to 700 mmHg has been proven in clinical trials. In connection with the COMFORT generators ARC 400 and ARC 350, TissueSeal PLUS is simply the preferred choice for LIGATION.

### LIGATION sequence



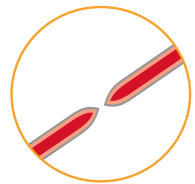
Hold the tissue



Connect and lock the TissueSeal® PLUS

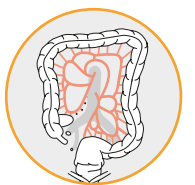


LIGATE until the signal sounds



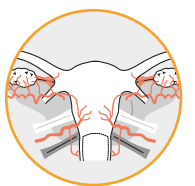
Separate the LIGATION

### Application ranges of the TissueSeal® PLUS



#### Surgical applications

- Colectomy
- Gastrectomy
- Liver resection
- Thyroidectomy
- Lobectomy



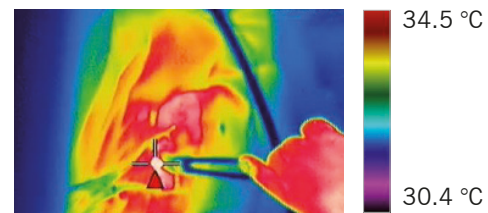
#### Gynaecological applications

- Hysterectomy
- Mastectomy



#### Urological applications

- Prostatectomy
- Cystectomy
- Nephrectomy



#### Application safety due to little heating-up

The sandwich structure reduces the thermal spread to < 1 mm. The active electrode surfaces are fully insulated from the instrument and therefore hardly transfer any heat.

#### References:

Schuld J, Richter S, Laschke MW, Sperling J, Menger MD, Schilling MK on behalf of the Surgical Task Force: Theatre and Instrument Technology of the German Association of General and Visceral Surgery (Chirurgische Arbeitsgemeinschaft: OP- und Instrumententechnik der Deutschen Gesellschaft für Allgemein- und Viszeralchirurgie). Evaluation study: BOWA TissueSeal® vs. Valleylab LigaSure™, BOWA, Gomaringen 2008

Harold KL, Pollinger H, Matthews BD, Kercher KW, Sing RF, Heniford BT: Comparison of ultrasonic energy, bipolar thermal energy, and vascular clips for the hemostasis of small-, medium-, and large-sized arteries. Surg Endosc 2003; 17(8), 1228–1230

Adamina M, Champagne B J, Hoffman L, Ermlich MB, Delaney CP: Randomized clinical trial comparing the cost and effectiveness of bipolar vessel sealers versus clips and vascular staplers for laparoscopic colorectal resection. Br J Surg 2011; 98(12), 1703–1712

**BOWA**  
EINFACH SICHER

BOWA-electronic GmbH & Co. KG  
Heinrich-Hertz-Straße 4–10  
72810 Gomaringen | Germany

Phone +49 (0) 7072-6002-0  
Fax +49 (0) 7072-6002-33  
info@bowa.de | bowa.de



# TissueSeal® PLUS

## THE LIGATION OF PRECISION AND ECONOMY

**BOWA**  
EINFACH SICHER

Made in Germany

## TissueSeal® PLUS – handling that has been properly thought through

134°C  
Autoclavable  
273°F



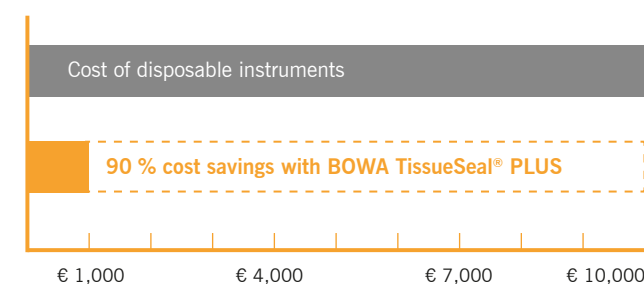
## TissueSeal® PLUS – real cutting edge technology

134°C  
Autoclavable  
273°F



**Process optimisation, quality assurance and suitability for use**  
Plug'n Cut COMFORT automatically identifies the instrument and preselects the right settings. The COMFORT sYSTEM continuously monitors the number of applications and logs them in the instrument itself.

### Cost benefits of BOWA TissueSeal® PLUS compared to disposable instruments after 50 procedures



**Economical and sustainable**  
High quality materials ensure application safety and long-term economy.

## BOWA TissueSeal® PLUS – safe in your hands

**The ligation of precision and economy**  
TissueSeal PLUS gives you everything you need for a LIGATION for open surgical applications in a single instrument. This way you can achieve shortened theatre times and reduced patient blood loss as well as ensuring that no foreign objects are left behind in the patient.

TissueSeal PLUS is manufactured from premium quality materials and has been designed according to state-of-the-art ergonomics. As a result you gain optimum handling and impressive tactility. Also, the point's sandwich structure ensures minimum temperature

built-up and the non-stick coating protects against tissue adhesion. The Plug'n Cut technology uses automatic instrument detection and parameter configuration for maximum effectiveness and safety. Furthermore, TissueSeal PLUS is fully autoclavable and can be reused up to 50 times.

TissueSeal PLUS combines maximum application safety and patient safety with economy and efficiency.

## The suitable solution for each requirement – an overview of all types

134°C  
Autoclavable  
273°F

	160 mm		760-216	COMFORT 4.5 m cable	<b>BOWA</b> 3 5 0	<b>BOWA</b> 4 0 0
	190 mm		760-219	COMFORT 4.5 m cable	<b>BOWA</b> 3 5 0	<b>BOWA</b> 4 0 0
	230 mm		760-223	COMFORT 4.5 m cable	<b>BOWA</b> 3 5 0	<b>BOWA</b> 4 0 0
	280 mm		760-228	COMFORT 4.5 m cable	<b>BOWA</b> 3 5 0	<b>BOWA</b> 4 0 0