

**BOWA**  
**LOTUS**



**LOTUS**

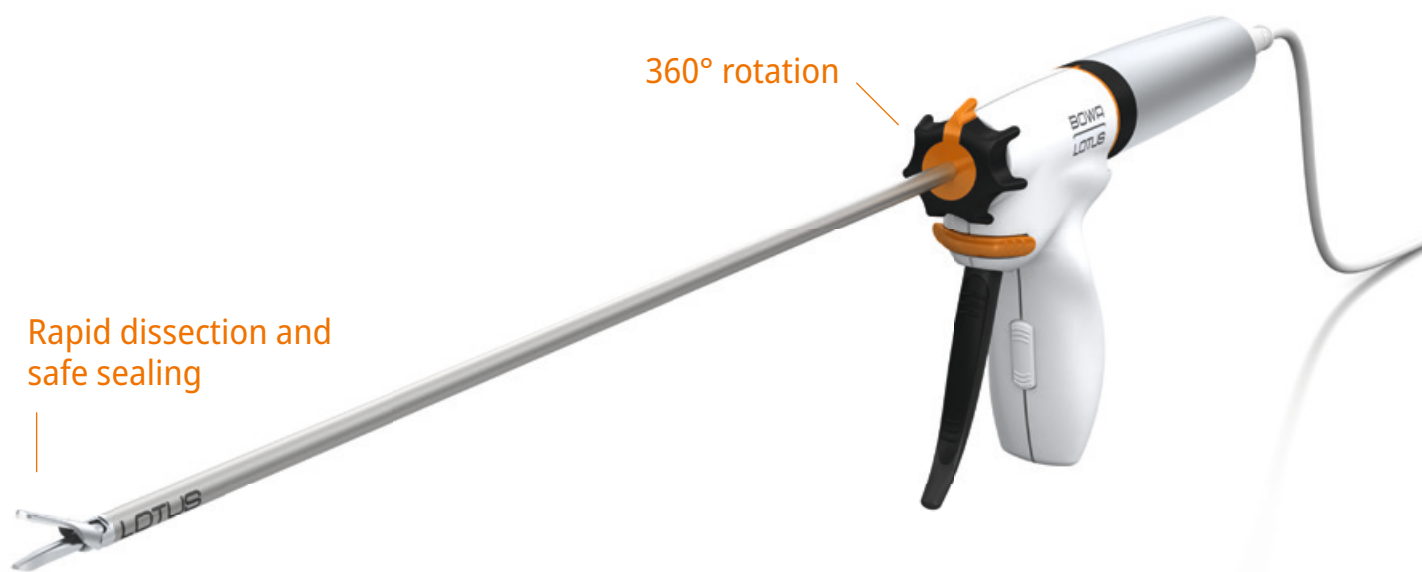
The powerful torsional  
ultrasonic scalpel



# LOTUS dissecting shears

Surgical PRECISION

The unique, torsional ultrasonic energy enables the surgeon to control the tissue effect depending on the power level and the jaw closing force applied. Through the trigger pressure, the user can directly influence the degree of haemostasis and cutting speed.



360° rotation

Rapid dissection and safe sealing

Fine, curved **jaws** for opening and visualization of tissue layers





## 3 Instruments for open, laparoscopic and bariatric applications

### LOTUS – for your surgical PRACTICE

- Handpiece fits perfectly in the hand and is comfortable and ergonomic to handle.
- Ideal ergonomic placement of the controls
- Intraoperative switching of power levels on the instrument itself: “HIGH” for faster dissection and “LOW” or “ULTRA LOW” for more pronounced haemostasis
- Quick and easy assembly of the instrument – no tools required

### AREAS OF APPLICATION



General surgery



Thoracic surgery



Gynaecology



ENT



Urology



Bariatric surgery

*“Within my gynaecology practice, I typically use LOTUS for my complex endometriosis resections. I find the speed and accuracy of the dissection a real advantage.*

*It is a versatile instrument that with practice can perform a variety of functions, such that it can be the primary instrument for most major laparoscopic procedures.”*

**Dominic Byrne, MD**

FRCOG FBSGE, Consultant Gynaecologist, Royal Cornwall Hospitals Trust

# LOTUS Liver Resectors

Ultrasonic dissectors specifically designed for liver parenchyma

Optimised for efficient coagulation and dissection of the liver parenchyma. Torsion ultrasound can be used to dissect the parenchyma to expose, skeletalise and isolate structures in the liver bed.



## AREA OF APPLICATION



Liver surgery

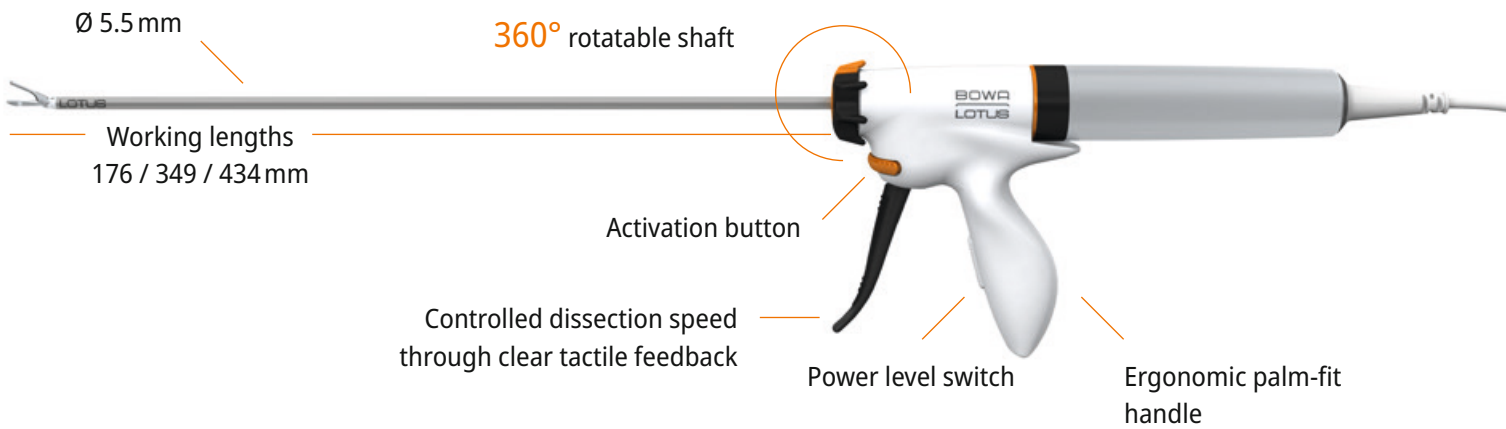




2 Instruments for open and laparoscopic liver surgery



# LOTUS system



## Three power levels with clear display

- The LOTUS generator has a clear and easy-to-read visual display and provides acoustic feedback during use.
- The additional "ULTRA LOW" power level enables particularly slow and carefully controlled power output for efficient haemostasis.





## — OPERATIONAL ADDED VALUE OF ULTRASONIC DISSECTION

- Rapid tissue dissection
- Controlled coagulation zone
- Safe closure of vessels
- Reduction of intraoperative instrument changes due to dissection and coagulation in one instrument

**BOWA**  
A C A D E M Y

LOTUS training on the  
BOWA Academy



A qualified support team



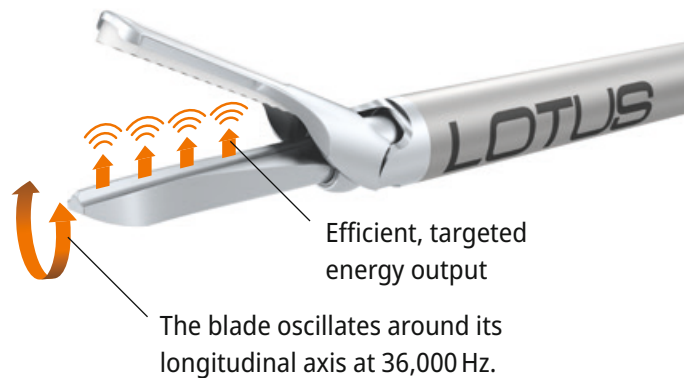
Cooperation with surgical societies

# Torsional ultrasonic energy

User-controlled application for efficient haemostasis and rapid dissection

## Unique energy output directly into the target tissue

With torsional ultrasonic energy, the waveguide tip oscillates in a small arc around its axis. In doing so, the energy can be focused to ensure a targeted compression of the grasped tissue.



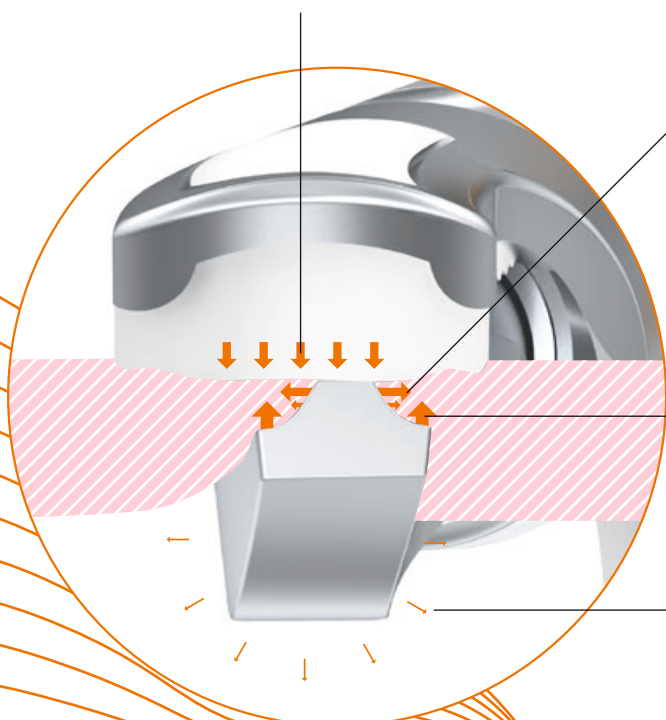
## Efficient dissection and coagulation

The compression force is responsible for direct energy transfer into the tissue and produces haemostatic dissection and coagulation in the form of heat.

## Advantages of torsional ultrasonic energy

The targeted energy output reduces energy dissipation compared to conventional longitudinal ultrasonic instruments. Unintentional distal energy output can thus be minimised. The efficiency of coagulation and dissection can be controlled by the surgeon when applying force on the handle.

Compression via grip pressure



Proportion of compression energy for dissection

Proportion of compression energy for coagulation

Comparatively low lateral energy output

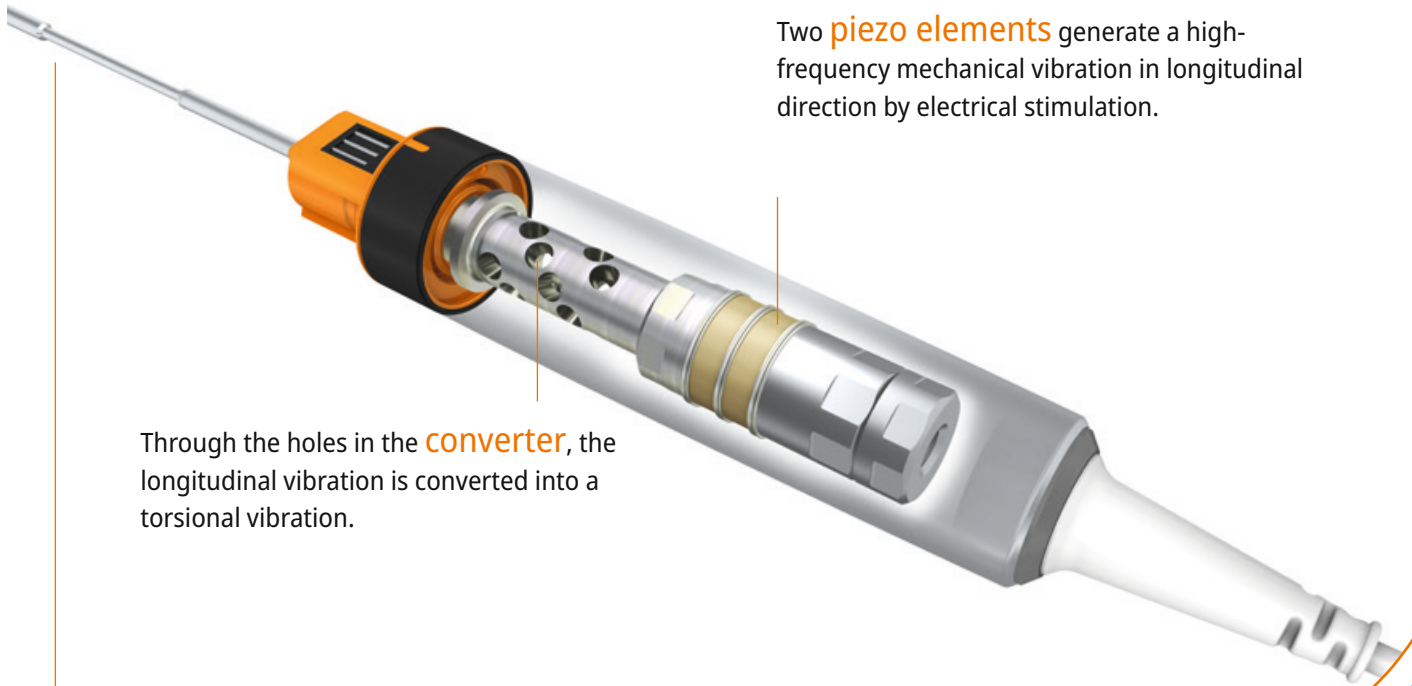


# Generation of the torsional vibration

Two **piezo elements** generate a high-frequency mechanical vibration in longitudinal direction by electrical stimulation.

Through the holes in the **converter**, the longitudinal vibration is converted into a torsional vibration.

The **waveguide** transmits the torsional vibration to the jaws for the unique torsional tissue effect.



## Ordering data

L

REF

### LOTUS dissecting shears, 360° rotation



Open surgery 200 / 360°, curved jaw	176 mm	Handpiece (disposable, 10 pcs. /VPE) Transducer (reusable)	DS5-200CD ES5-200CT
Laparoscopy 400 / 360°, curved jaw	349 mm	Handpiece (disposable, 10 pcs. /VPE) Transducer (reusable)	DS5-400CD ES5-400CT
Bariatric surgery 500 / 360°, Curved jaw	434 mm	Handpiece (disposable, 10 pcs. /VPE) Transducer (reusable)	DS5-500CD ES5-500CT

### LOTUS dissecting shears



Open surgery 200, curved jaw	176 mm	Handpiece (disposable, 10 pcs. /VPE) Transducer (reusable)	DS4-200CD ES4-200CT
Laparoscopy 400, curved jaw	349 mm	Handpiece (disposable, 10 pcs. /VPE) Transducer (reusable)	DS4-400CD ES4-400CT
Bariatric surgery 500, curved jaw	434 mm	Handpiece (disposable, 10 pcs. /VPE) Transducer (reusable)	DS4-500CD ES4-500CT

### LOTUS liver resector, 360° rotation



Open surgery 200 / 360°, straight jaw	176 mm	Handpiece (disposable, 10 pcs. /VPE) Transducer (reusable)	LR5-200SD LR5-200ST
Laparoscopy 400 / 360°, straight jaw	349 mm	Handpiece (disposable, 10 pcs. /VPE) Transducer (reusable)	LR5-400SD LR5-400ST

### LOTUS liver resector



Open surgery 200, straight jaw	176 mm	Handpiece (disposable, 10 pcs. /VPE) Transducer (reusable)	LR4-200SD LR3-200
Laparoscopy 400, straight jaw	349 mm	Handpiece (disposable, 10 pcs. /VPE) Transducer (reusable)	LR4-400SD LR3-400

Only for LG4 generators with software version 6 or higher

## Ordering data

REF

LOTUS generator, series 4 type



LG4

### Optional accessories



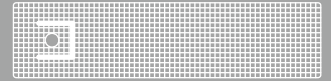
LOTUS foot switch LG4

LF4

LOTUS CART, equipment trolley, assembled

902-070

### LOTUS reprocessing basket with lid



For transducers: <b>ES5-200CT</b> , <b>ES5-400CT</b> , LR5-200ST, LR5-400ST	650x150x68 mm	773-986
For transducers: <b>ES5-500CT</b>	730x150x68 mm	773-987
For transducers: <b>ES4-200CT</b> , <b>ES4-400CT</b> , <b>LR3-200</b> , <b>LR3-400</b>	550x150x77 mm	773-984
For transducers: <b>ES4-500CT</b>	640x150x77 mm	773-985

## LOTUS – with torsional ultrasonic technology for efficient dissection

Contact your authorised BOWA medical device  
consultant now.

[support@bowa-medical.com](mailto:support@bowa-medical.com)

