

# THERAPEUTIC SOLUTIONS FOR ESD PROCEDURES

**FUJIFILM**  
Value from Innovation

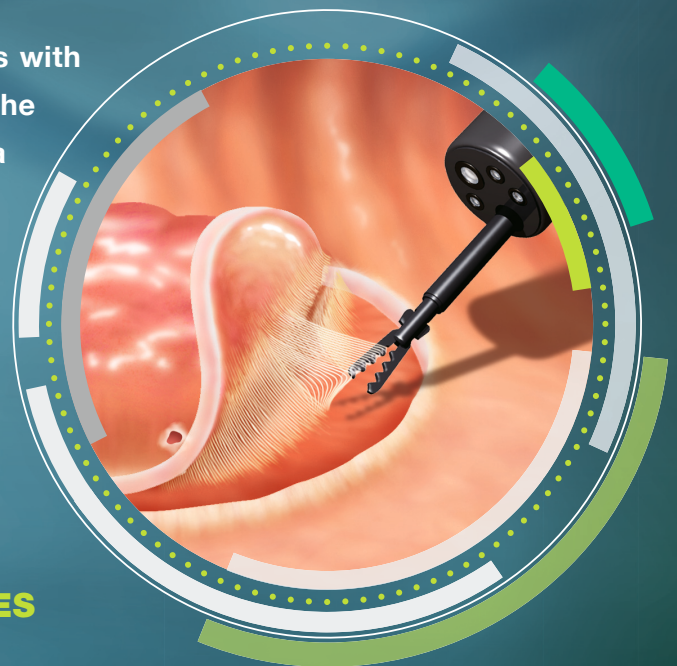


# PRECISE LESION APPROACH

## ENDOSCOPIC SUBMUCOSAL DISSECTION

With ESD (endoscopic submucosal dissection), surface changes in the mucous membranes can be surgically removed using electrosurgical knives. One advantage of this new technique is the reduction of the extent of surgical intervention, as the treatment is performed using the body's natural orifices.

The en bloc excision of mucous membrane sections with pathological changes allows pathologists to assess the probability of whether the whole of the affected area has been removed. By contrast, such a statement is not possible for the alternative piecemeal method, as the affected area is removed in a series of small steps using loops. ESD provides patients with greater safety and the most comprehensive care possible.



## SELECTION OF INNOVATIVE TECHNOLOGIES



### FICE TECHNOLOGY

FICE can enhance slight colour differences such as vascular and mucosal patterns without tissue staining. The procedure digitally selects three wavelengths of light and displays reconstructed images.



### MULTI ZOOM TECHNOLOGY

The latest Multi Zoom technology enables programming in up to 3 magnification modes according to your needs to realise an easy-to-control zoom endoscopy with excellent detectability of structures and ultrastructures.



### SUPER CCD TECHNOLOGY

The Super CCD and high performance optical system ensures high quality images. It provides brilliant images which can facilitate procedures for detection and treatment of lesions.



### CMOS TECHNOLOGY

The leading-edge CMOS technology realises less noise and brilliant images. The chip is placed directly in the tip of the scope enabling the CMOS image sensor to change the analogue signal to digital without interference from outside noise during transmission.



### SMART BEND TECHNOLOGY

Smart Bend allows excellent manoeuvrability and observation through a 210° bending angle. In addition, the smart bending ability and the small bending radius make treatment of difficult to reach lesions easier.



### COLOASSIST TECHNOLOGY

By adopting ColoAssist II both torque and force transmission have been improved. Even when the tip of the scope is located in the deep part of colon, it can react sensitively to produce better operability and reduce patient discomfort. Using ColoAssist II, it is possible to transmit the insertion power to the tip of the scope more effectively.



### WATER JET TECHNOLOGY

The Water Jet function aids optimal and constant visualisation for both diagnostic and therapeutic procedures.



Thanks to the use of high resolution endoscopes with the CMOS chip and optical zoom, like the ELUXEO™ Video Gastroscope EG-760Z or the ELUXEO™ Video Colonoscope EC-760ZP-VM / VL, pathological changes to the mucous membranes of the digestive tract can be identified even earlier. Any early transformation can thus be efficiently treated by less invasive procedures supporting en bloc resection.

## THERAPEUTIC ENDOSCOPES

### FEATURES

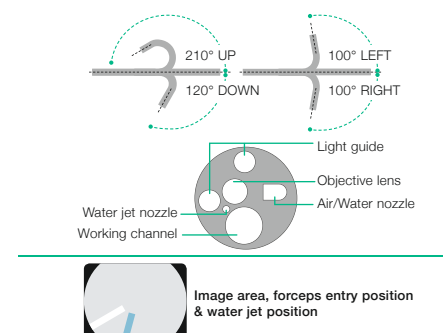
- **Smart Bend** provides excellent manoeuvrability, observation and therapeutic treatments by 210° up angulation and a small bending radius.
- **Enlarged forceps channel for improved suction capacity** – The forceps channel of 3.2mm realises a higher suction ability. Due to better positioning it offers an improved endoscopic field of view.
- **High resolution image** – The new Super CCD high performance optical system ensures vivid and high quality images. Together with FICE providing clear images, such features enhance various procedures including detection and treatment of lesions.



### VIDEO GASTROSCOPE **EG-580RD** Smart Bend Treatment Type



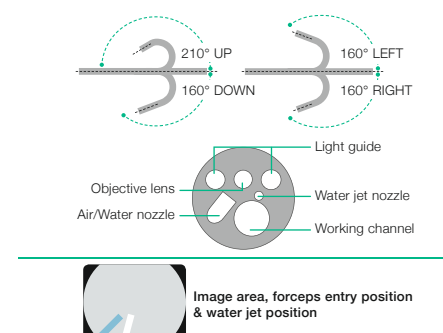
Viewing direction	0° (Forward)
Field of view	140°
Observation range	3–100mm
Bending capability	Up 210° / Down 120° Right 100° / Left 100°
Distal end diameter	9.8mm
Flexible portion diameter	9.8mm
Working channel diameter	3.2mm
Working length	1,100mm
Total length	1,400mm



### VIDEO COLONOSCOPE **EC-580RD-M / RD-L** Smart Bend Slim & Treatment Type



Field of view	140°
Observation range	3–100mm
Bending capability	Up 210° / Down 160° Right 160° / Left 160°
Distal end diameter	9.8mm
Flexible portion diameter	10.5mm
Working channel diameter	3.2mm
Working length	1,330 / 1,690mm
Total length	1,630 / 1,990mm



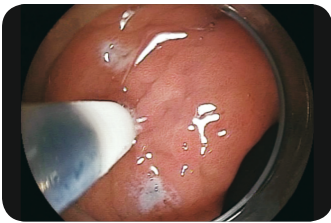


# ESD KNIVES

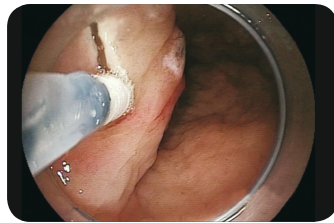
**FLUSH KNIFE** and **FLUSH KNIFE BT** are aimed at achieving enhanced usability ideal for all physicians – from trainees to skilled ESD practitioners.

## FEATURES

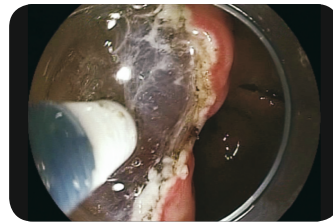
**One knife covers from marking to arrest of bleeding, achieving high versatility** – One single knife allows procedures including 1. marking, 2. incision, 3. lifting, 4. dissection and 5. arrest of bleeding. The high versatility improves operation abilities and cost efficiencies. Safer and more efficient treatment is achieved by using the protruding knife length best suited for each treatment area.



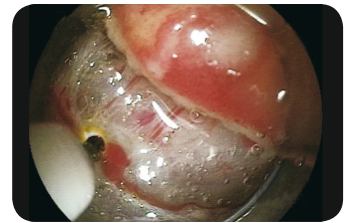
1. Marking



2. Mucosal incision



3. Lifting and 4. Submucosal dissection



5. Arrest of bleeding

## FlushKnife



3 mm 2.5 mm 2 mm 1.5 mm 1 mm

### FLUSH KNIFE

FlushKnife has a slim electrode portion tip with high voltage concentration, which provides stronger dissection capability. The working length is 180 cm. For the 1.5 mm and the 2.0 mm tip a working length of 230 cm is also available.

## FlushKnife BT



3 mm 2.5 mm 2 mm 1.5 mm

### FLUSH KNIFE BT

**The tip is designed to enhance safety and treatment capability.** FlushKnife BT has a ball tip, which produces good traction, enabling the target tissue to be dissected smoothly. The ball tip touches a wider part of the tissue and arrests bleeding more efficiently. The working length is 180 cm. For the 1.5 mm and the 2.0 mm tip a working length of 230 cm is also available.

## RECOMMENDED APPLICATIONS

Diameter	1 mm	1.5 mm	2 mm	2.5 mm	3 mm
Oesophagus	○	◎	◎	△	△
Stomach	○	◎	◎	◎	◎
Colon	○	◎	◎	△	△

◎ Best indication ○ Possible Use △ Indicated in certain cases

Please note: Examples of the suitable protruding lengths are suggested by Takashi Toyonaga M.D. of Kobe University Hospital. A physician must take into consideration each particular condition of the area or lesion to be dissected when selecting a protruding knife length.



## ESD KNIFE **CLUTCH CUTTER** for various techniques

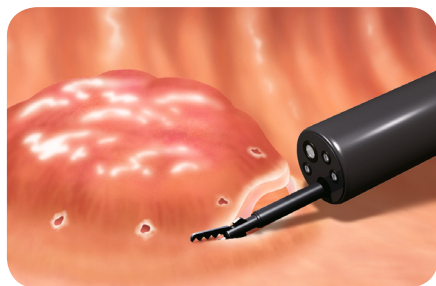
### THE 3-IN-1 ESD TOOL FOR EFFICIENT AND SAFE THERAPEUTIC PROCEDURES:

#### 1. incision, 2. dissection and 3. coagulation

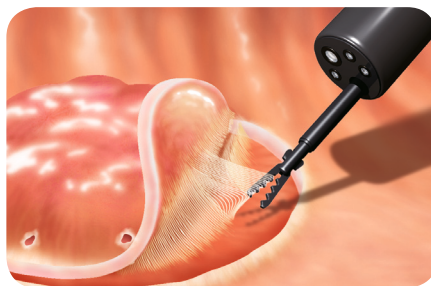
The ClutchCutter is a well proven, innovative surgical tool that can safely grasp, apply pressure and traction to, and electrically dissect and coagulate the target area as in a biopsy. All stages of the ESD procedure can be performed with this 3-in-1 tool, from marking to making incisions and coagulating. In procedures that need to be performed perpendicular to the muscular layer, which can cause difficulties when using a needle knife, the ClutchCutter makes it possible to grasp, lift up and incrementally dissect the tissue. This ensures a safer ESD procedure.

#### FEATURES

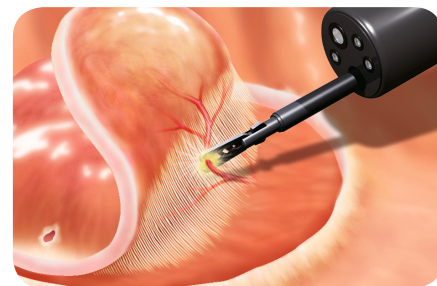
- **Toothed jaws** – to grip the mucosa membrane securely and efficient
- **Rotatable distal jaws** – for a precise lesion approach
- **Insulated outer edge** – for a safe procedure minimizing the risk of damaging local tissue
- **Two jaw lengths** – available in 3.5 mm and 5 mm



1. Incision



2. Dissection



3. Coagulation

### ClutchCutter



ClutchCutter DP2618DT-35-



ClutchCutter DP2618DT-50-

## CLUTCH CUTTER **DP2618DT**

Product name	ClutchCutter single use	
Identifier	-35-	-50-
Jaw length	3.5 mm	5.0 mm
Working length	1,800 mm	
Maximum diameter of insertion portion	2.7 mm	
Working channel diameter of compatible endoscope	2.8 mm or more	



# COMPONENT PARTS

**ST HOODS** help to perform safer and more efficient ESD and POEM by preventing the surgical field of view being blocked by mucosa and provide a clear view during the endoscopic treatment.

## FEATURES OF SHORT TYPE ST HOODS

- **Shorter distance from the endoscope tip** and wider inner diameter of the distal end than current hoods enhance visibility.
- **Easier insertion of accessories** without guide ditch is available for all series of endoscopes.
- Equipped with **two drains**.

## ST HOOD Short Type



Model	DH-28GR	DH-29CR	DH-30CR
Outer diameter	11.8mm	13.0mm	14.8mm
Inner diameter of tip	7.0mm	7.0mm	7.0mm
Tip length	8.0mm	8.0mm	8.0mm
Drains	2	2	2
Applicable endoscope	EG-590WR EG-530WR EC-580RD M/L	EG-590ZW, M, L EC-530MP EC-530LP	EC-600WM, WI, WL EC-590WM4, WI4, WL4, EC-590ZW3 M/L, EC-530WM3, WI3, WL4

## ST HOOD



Model	DH-15GR	DH-16CR
Outer diameter	12.2mm	16mm
Inner diameter of tip	7.0mm	7.0mm
Tip length	8.3mm	8.3mm
Drains	1	1
Applicable endoscope	EG-600WR, EG-600ZW, EG-590WR, EG-530WR, EG-580RD	EC-600WM, WI, WL, EC-600ZW M/L, EC-590WM4, WI4, WL4, EC-590ZW3 M/L, EC-530WM3, WI3, WL3
	Featuring Accessory Guide	Featuring Accessory Guide

**In following papers, it is described how ST hoods are used as a tool for the "pocket-creation method":**

- Duodenal endoscopic submucosal dissection is feasible using the pocket-creation method. Endoscopy. 2017 Jan;49(1):8-14. doi: 10.1055/s-0042-116315. Epub 2016 Nov 22.
- The pocket-creation method of ESD for gastric neoplasms. Gastrointest Endosc. 2016 Feb;83(2):457-8. doi: 10.1016/j.gie.2015.08.068. Epub 2015 Sep 7.
- Pocket-creation method of endoscopic submucosal dissection to achieve en bloc resection of giant colorectal subpedunculated neoplastic lesions. Endoscopy. 2014;46 Suppl 1 UCTN:E421-2. doi: 10.1055/s-0034-1377438. Epub 2014 Oct 14.

**Specially designed water pump JW-2 for advanced endoscopic examination**

**WATER PUMP JW-2**

Proprietary piping technology enables water flow to be quickly stopped. The one litre water bottle enables prolonged water use and minimises the need for constant refilling.



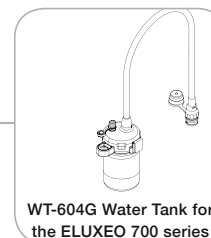
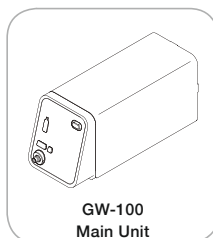
**Our latest CO<sub>2</sub> insufflator GW-100 offers clinicians an optimised and easy-to-handle procedure as well as maximum patient comfort.**

**FEATURES**

- Direct connection to hospital's medical CO<sub>2</sub> pipeline as well as to medical CO<sub>2</sub> cylinder
- Easy-to-use CO<sub>2</sub> flow rate switching function and compact design
- 2 controlled flow rate settings

**CO<sub>2</sub> INSUFFLATOR GW-100**

For fast resorption of insufflated CO<sub>2</sub> for timesaving and patient friendly examinations.



Tube sets for the connection of GW-100 to the medical gas pipeline and medical gas cylinders are available.



**ADVANCING DEEPER INSIGHTS  
IN ENDOSCOPY**

**FUJIFILM**

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