

# DrOppel®

FDA

CE  
0120

SP  
C US

KFDA

RADIO FREQUENCY ELECTROSURGICAL DEVICE **ST-501**

The Symbol of Radio Frequency Surgical Unit

RF  
SYSTEM



RADIO FREQUENCY SURGICAL UNIT

DrOppel®

## For the Operation

OB / GYN  
·  
General Surgery  
·  
Proctology  
·  
CS  
·  
OP. Room  
·  
ENT  
·  
Plastic Surgery  
·  
Urology  
·  
Dermatology  
·  
NS  
·  
OS  
·  
Pain Clinic  
·  
Ophthalmology

**sometech**®  
www.sometech.com  
SINCE 1989



**The New Innovative Function!**  
.....  
Time select Function

## Time select Funtion

- The innovative and new function enables user to make more accurate and safer coagulation by time selection (continuous, 1sec, 1/2 sec, 1/4sec, 1/8sec).
- Brilliant ability on micro surgery and nerve block

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## Features

- Not being heated by itself, electrode lets the cellular tissue produce the Joule heat and operates Hemostasis, Cutting, and Coagulation.
- The radio frequency output of 4MHz
  - The precise operation is capable.
  - By minimizing damage to the cellular tissue, the fast healing can be secured.
- Compact design with a great output power.
  - 700W peak power on 200 $\Omega$  load.
- No odor and no smoke in operation.
- Coagulation depth is determined by electrode.
  - $\varnothing$  6mm semi-ball electrode: coagulation to the 5mm in depth
  - $\varnothing$  4mm semi-ball electrode: coagulation to the 3mm in depth
  - $\varnothing$  3mm ball electrode: coagulation to the 2mm in depth

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- Ø 4mm semi-ball electrode: coagulation to the 3mm in depth

- Ø 3mm ball electrode: coagulation to the 2mm in depth

## Uncopyable and unique function

- All functions can be carried out just by choosing the electrode and controlling the output power without any mode change such as pure cut, blended cut, coag, micro coag, etc.
- The excellent functions of Hemostasis and coagulation are performed even in the massive bleeding.
- Thanks to its low-voltage of radio frequency output, bringing up no electric spark, there is neither carbonization and nor damage to the surrounding cellular tissue.
- Safety can be secured because this system is free from electric shock and burn which current electric surgical units make.
- Durability and long life cycle.
- The great coagulation and cutting capabilities not only in the open surgery but also in the endoscopic surgery.
- Bipolar and monopolar function
- Various electrodes (Unlimited applications)

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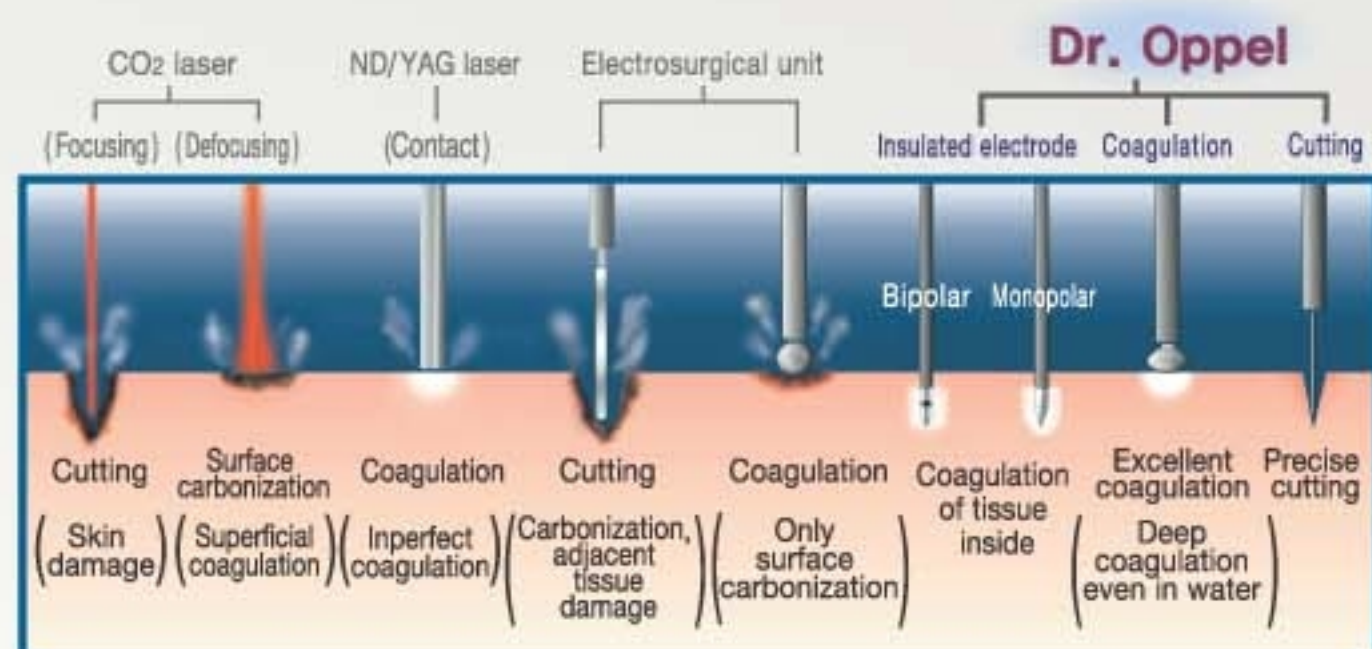
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### The distinctive functions from other electrosurgical units and lasers





## OB / GYN

- Conization or LLETZ
- Cervical erosion
- Condyloma
- Bartholinitis
- Polyp removal
- Cysts, tumors removal
- Laparoscopic surgery
- Hysteroscopic surgery
- Precise operation with an operating microscope (Tubal reversal and vasovasotomy)
- Treatment of umbilical cord
- Bleeding control in C/S
- Vaginoplasty

## Operating room/General Surgery/Proctology

- Internal hemorrhoids, external hemorrhoids
- Anal fissure, fistula, anal prolapse
- Periportal abscess
- Nevus and freckle removal
- Wart and corn removal
- Condyloma, polyps removal
- Circumcision
- Osmidrosis axilla
- Hair root removal
- Various open surgery
  - Pure cutting, hemostatic cutting, coagulation, hemostasis
- Various endoscopic surgery
  - Pure cutting, hemostatic cutting, coagulation, hemostasis

## ENT

- Snoring
- Chronic hypertrophic rhinitis
- Tonsillectomy
- Chronic tonsillitis
- Adenoidectomy
- Exudative otitis media
- Chorditis vocalis
- Hemostatic cutting, pure cutting, coagulation
- Hemostasis
- Epistaxis

## Dermatology/ Plastic Surgery/ Urology

- Nevus and freckle removal
- Wart and corn removal
- Condyloma, polyp removal
- Osmidrosis axilla and hair root removal
- Volume reduction of masseter muscle
- Volume reduction of triceps brachii muscle
- Telangiectasia
- Varix coagulation
- Hemostasis
- Micro coagulation
- Volume reduction of gastrocnemius muscle
- Skin incisions
- Cosmetic repair
- Endo surgery
- Prostatomegaly coagulation
- Lifting of facial wrinkles

## NS/OS/Pain Clinic

- Discoplasty using spinal needle (17 gauge)
- Radio frequency diathermy after discectomy with C-arm X-ray
- Endoscopic radio frequency diathermy after discectomy
- Revision surgery
- Endoscopic surgery (Incision, coagulation, hemostasis)
- Open surgery
  - Incision, hemostatic cutting, coagulation (Bipolar, monopolar), micro coagulation, micro cutting
- Various operations of NS
  - Obstructive hydrocephalus, resection of small tumors, membranectomy, colloid cyst open, ventricle open
- Various operation of OS
  - Incision of meniscus, splitting lateral retinaculum, incision of synovial folds

## Ophthalmology (Ocular Plasty Surgery)

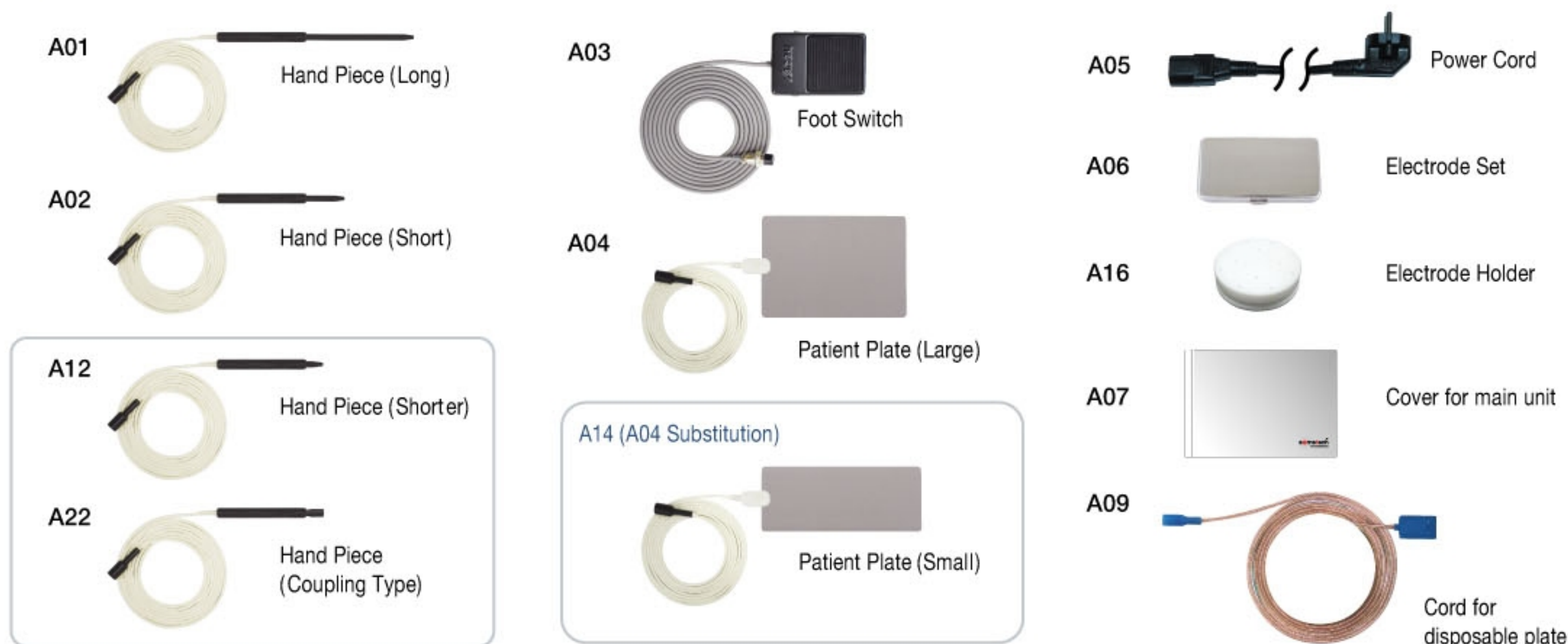
- Blepharoplasty
- Blepharism
- Dacryocystorhinostomy
- Medial (Inner) canthus correction
- Blepharectomy
- Blepharophimosis



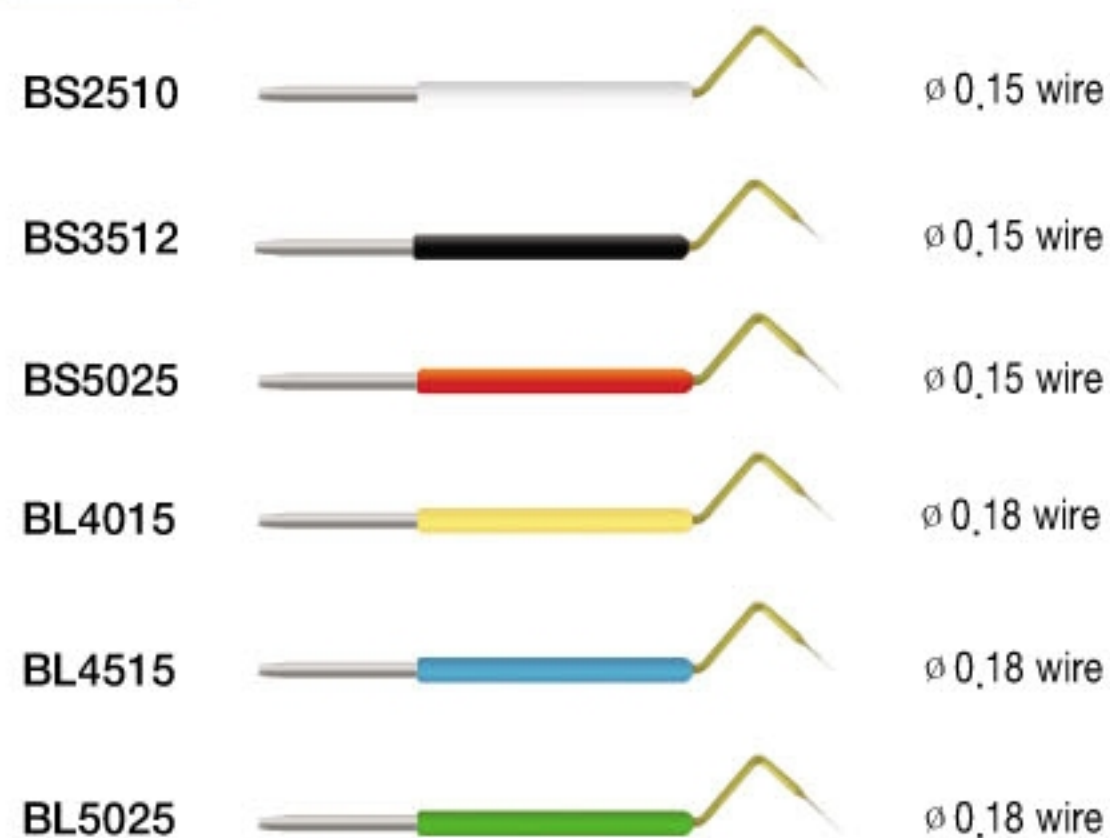
# Accessories

- Various accessories represent our great market experience.

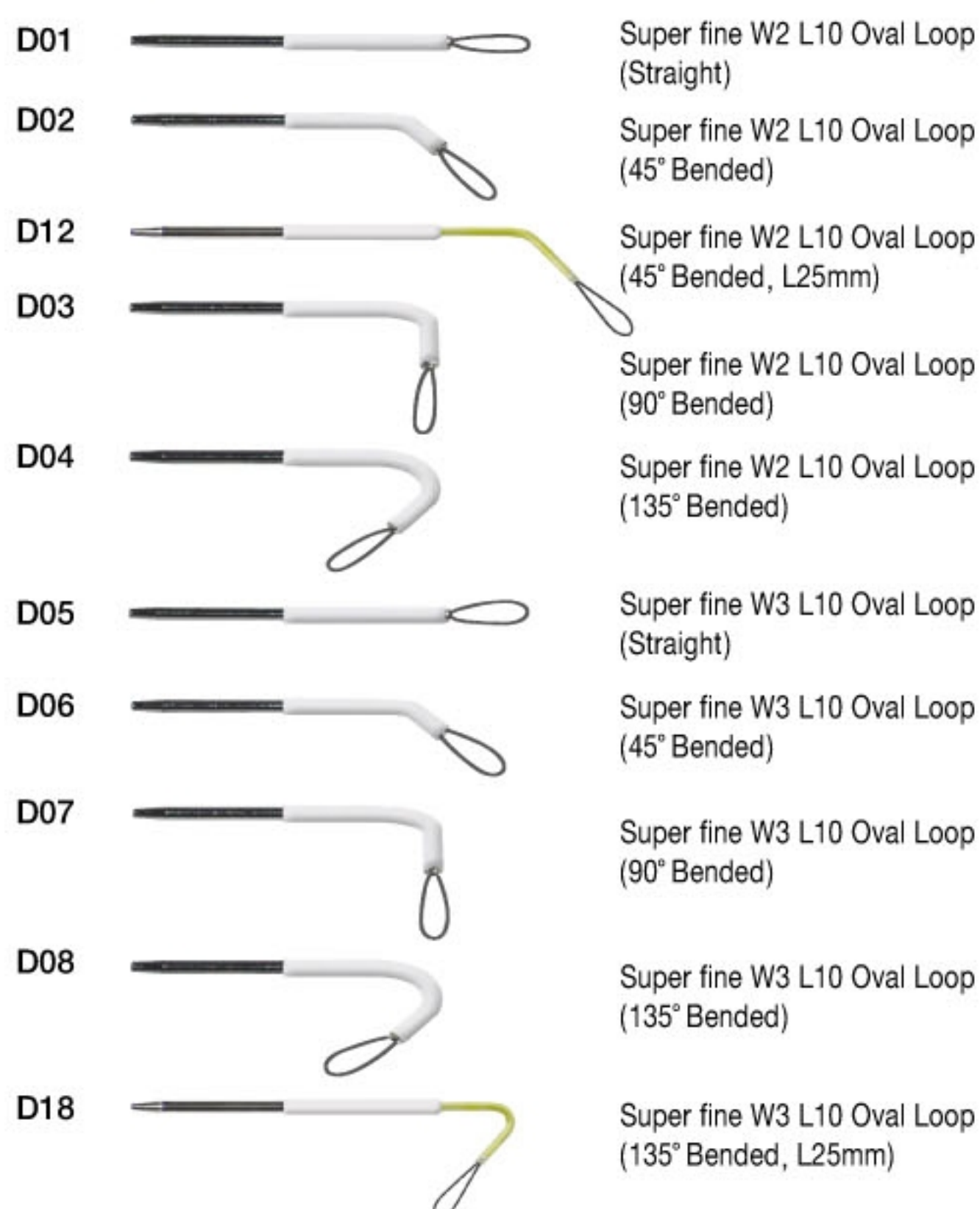
## A Series ST-501 Standard accessories



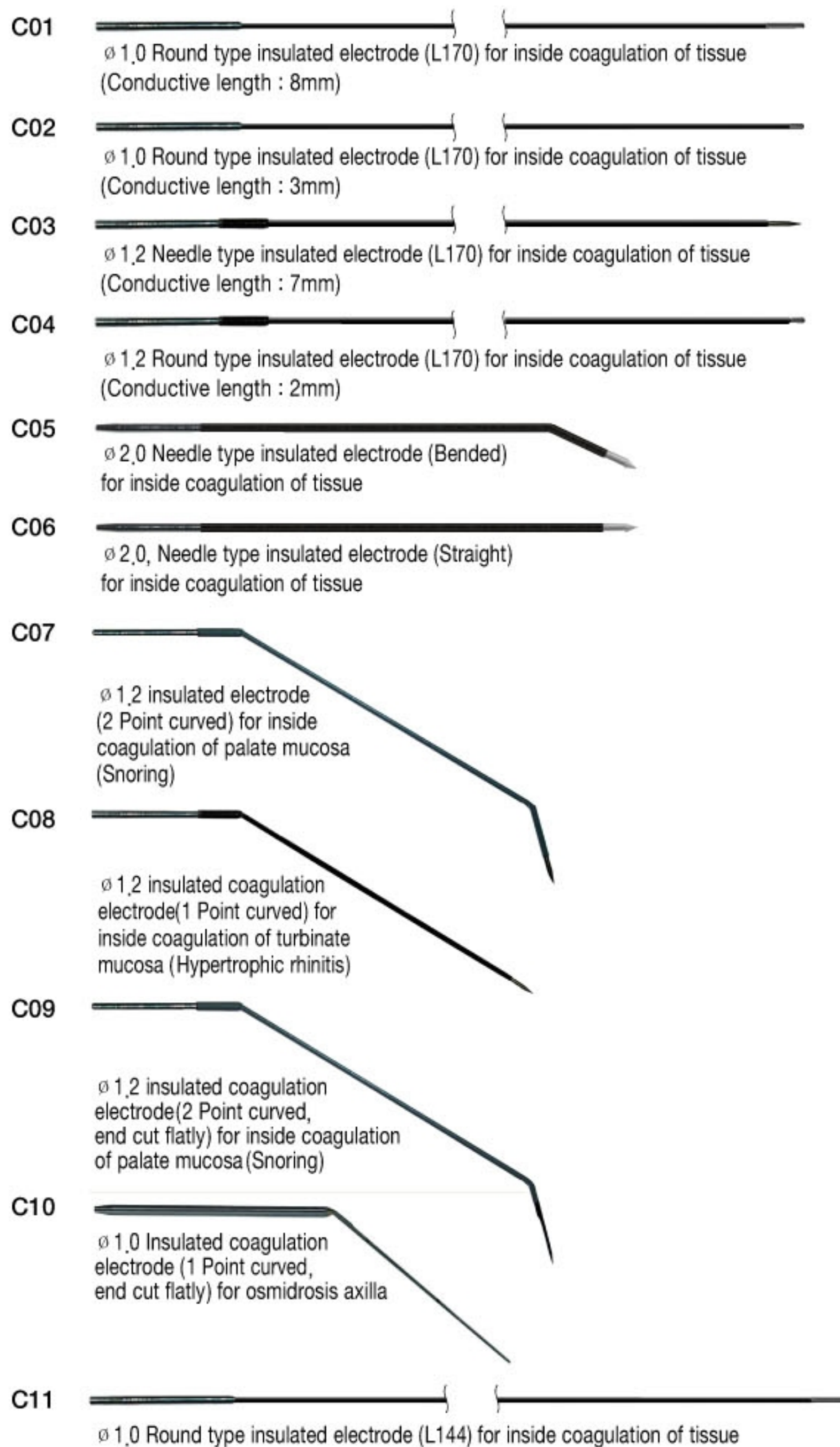
## B Series Hair removal electrodes



## D Series Oval loop electrodes





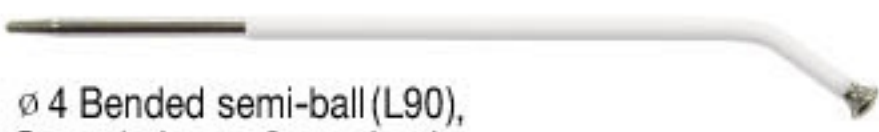


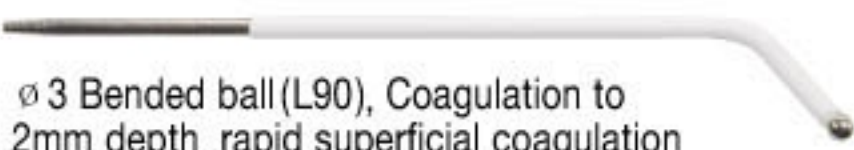



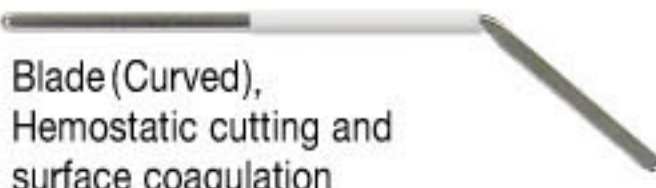






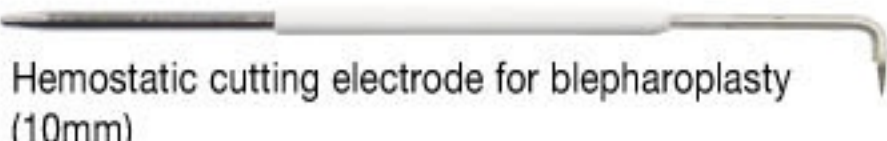
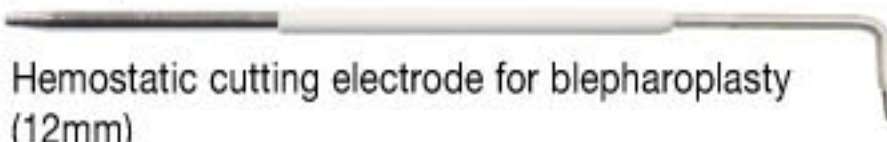
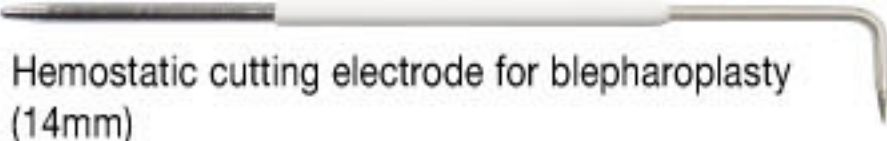


## C Series Insulated coagulation electrodes (Monopolar)





## E Series Electrodes for coagulation and hemostatic cutting

- E01**   $\varnothing$  6 Bended semi-ball, Coagulation to 5mm depth
- E02**   $\varnothing$  6 Straight semi-ball, Coagulation to 5mm depth
- E03**   $\varnothing$  4 Straight semi-ball, Coagulation to 3mm depth
- E03a**   $\varnothing$  4 Straight semi-ball (L90), Coagulation to 3mm depth
- E03b**   $\varnothing$  4 Bended semi-ball (L90), Coagulation to 3mm depth
- E04**   $\varnothing$  3 Straight ball, Coagulation to 2mm depth, rapid superficial coagulation
- E04a**   $\varnothing$  3 Straight ball (L90), Coagulation to 2mm depth, rapid superficial coagulation
- E04b**   $\varnothing$  3 Bended ball (L90), Coagulation to 2mm depth, rapid superficial coagulation
- E05**   $\varnothing$  2 Straight ball, Hemostasis and Coagulation
- E05a**   $\varnothing$  2 Bended ball (L90), Epistaxis hemostasis
- E06**  Spire, Micro coagulation
- E07**  Blade (Curved), Hemostatic cutting and surface coagulation
- E08**  Spear, Hemostatic cutting and surface coagulation
- E09**  Blade (Straight), Hemostatic cutting and surface coagulation
- E09a**  Blade (Straight), Hemostatic cutting and surface coagulation  
\* Breast surgery
- E10a**  Hemostatic cutting electrode for blepharoplasty (10mm)
- E10b**  Hemostatic cutting electrode for blepharoplasty (15mm)
- E10c**  Hemostatic cutting electrode for blepharoplasty (20mm)
- E11a**  Hemostatic cutting electrode for blepharoplasty (10mm)
- E11b**  Hemostatic cutting electrode for blepharoplasty (12mm)
- E11c**  Hemostatic cutting electrode for blepharoplasty (14mm)




## F Series Conization electrodes ( $\varnothing$ 0.25 Tungsten wire)

- F01**  W 10mm x L 20mm
- F02**  W 10mm x L 25mm
- F03**  W 15mm x L 10mm
- F04**  W 15mm x L 25mm
- F05**  W 17mm x L 17mm

## G Series Round LLETZ electrodes ( $\varnothing$ 0.25 Tungsten wire)

- G01**  Fine  $\varnothing$  15 Loop, Round LLETZ
- G02**  Fine  $\varnothing$  20 Loop, Round LLETZ
- G03**  Fine  $\varnothing$  25 Loop, Round LLETZ

## H Series Cone LLETZ electrodes ( $\varnothing$ 0.25 Tungsten wire)

- H01**  Fine W 15mm x L 15mm, Cone LLETZ
- H02**  Fine W 20mm x L 18mm, Cone LLETZ
- H03**  Fine W 25mm x L 20mm, Cone LLETZ















## I Series Bipolar cord, adaptor

- I18**  Bipolar cord
- I09**  Bipolar cord adaptor










# Accessories








## J Series Needle type electrodes for micro coagulation and pure cutting

J01		Super fine L5 Needle
J02		Fine L10 Needle
J03		Regular L15 Needle
J04		Regular L15 round Needle
J05		ø 0.4 Tungsten wire L15 Needle
J06		Super fine L5 bended Needle
J07		Fine L10 bended Needle
J08		Regular L15 bended Needle
J09		ø 0.4 Tungsten wire L15 bended Needle
J10		ø 0.5 Stainless steel bended electrode (Ear drum perforation electrode for exudative otitis media)
J10a		ø 1.5 Stainless steel pipe electrode (Ear drum perforation electrode for exudative otitis media)
J11		Micro cutting (2mm)
J12		Micro cutting (3mm)
J13		Micro cutting (5mm)








## K Series Loop type electrodes

K01		Super fine ø 4 Loop
K11		Super fine ø 4 Loop (L25mm)
K02		Super fine ø 6 Loop
K12		Super fine ø 6 Loop (L25mm)
K03		Fine ø 8 Loop
K04		Fine ø 10 Loop
K05		Regular fine ø 12 Loop








## L Series Diamond type electrodes

L01		Super fine L4 Diamond
L11		Super fine L4 Diamond (L25mm)
L02		Super fine L6 Diamond
L12		Super fine L6 Diamond (L25mm)
L03		Fine L8 Diamond
L04		Fine L10 Diamond
L05		Regular L12 Diamond








## M Series Triangle type electrodes

M01		Super fine L4 Triangular
M11		Super fine L4 Triangular (L25mm)
M02		Super fine L6 Triangular
M12		Super fine L6 Triangular (L25mm)
M03		Fine L8 Triangular
M04		Fine L10 Triangular
M05		Regular L12 Triangular

## N Series Oval loop type electrodes

N01		Super fine L4 Oval Loop
N11		Super fine L4 Oval Loop (L25mm)
N02		Super fine L5 Oval Loop
N12		Super fine L5 Oval Loop (L25mm)
N03		Fine L6 Oval Loop
N04		Fine L8 Oval Loop
N05		Regular L10 Oval Loop

## O Series Square type electrodes

O01		Super fine L4 Square Loop
O11		Super fine L4 Square Loop (L25mm)
O02		Super fine L6 Square Loop
O12		Super fine L6 Square Loop (L25mm)
O03		Fine L8 Square Loop
O04		Fine L10 Square Loop
O05		Regular L12 Square Loop

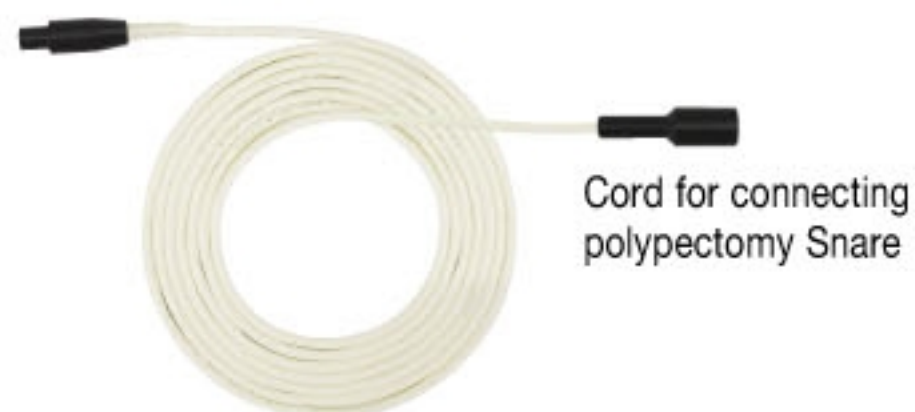
## P Series Insulated needle type bipolar

P01		Bipolar Electrode for Coagulation
P02		Bipolar Electrode for Coagulation (Liver Operating)



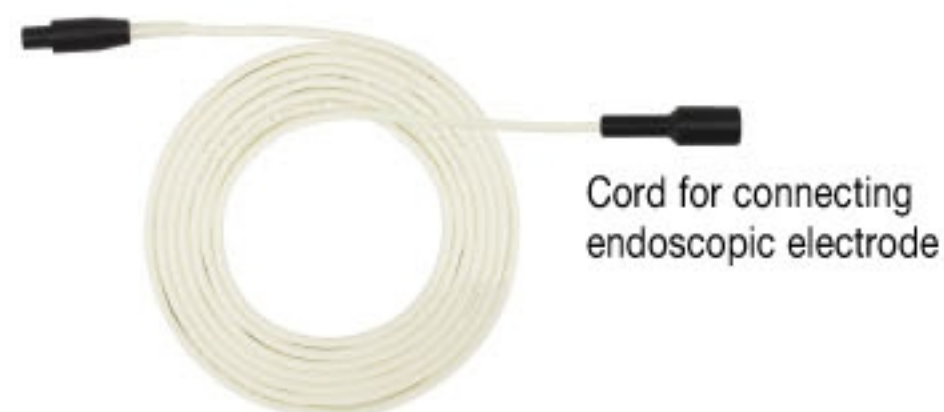
## S Series Connecting cord

S01



Cord for connecting polypectomy Snare

S02



Cord for connecting endoscopic electrode

## T Series Insulated bipolar electrode for coagulation(Disposable)

T01



Bipolar cord (For "T" series)

T02a



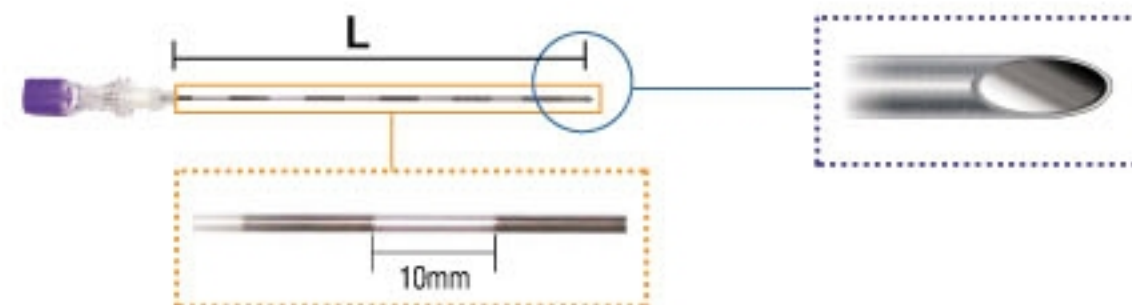
17 Gauge needle (L152)

T02b



17 Gauge needle (L152)

T02c



17 Gauge needle (L120)

T03



Insulated bipolar electrode for discoplasty and varix coagulation (L225)

T04



Insulated bipolar electrode for spinal endoscope (L350)

T05



Insulated bipolar electrode for inside coagulation of tissues for prosatomegaly or breast cancer (L205)

T16



$\varnothing$  1,3 Insulated bipolar electrode for inside coagulation of palate mucosa (for snoring) and hemorrhoid

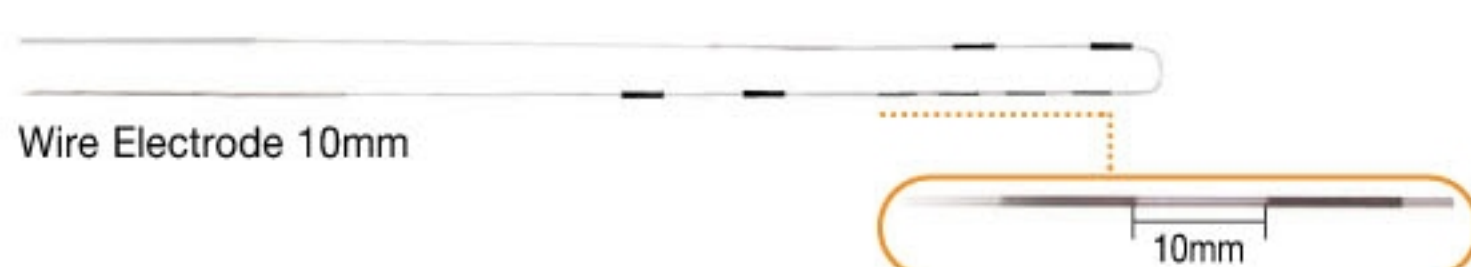
T17



$\varnothing$  1,3 Insulated bipolar electrode for inside coagulation of turbinate mucosa (for hypertrophic rhinitis)

## U Series Insulated electrode (L500) for significantly reducing the permanent frown line. (Coagulation length : 10mm, 20mm)

U11



Wire Electrode 10mm

U12



Wire Electrode 20mm

U14



Code for Wire Electrode





### SPECIFICATION

<b>MODEL NAME</b>	Dr. Oppel ST-501
<b>OUTPUT POWER</b>	MONOPOLAR : 125W (Average power on 200 $\Omega$ load) 700W (Peak power on 200 $\Omega$ load) BIPOLAR : 50W (Average power on 200 $\Omega$ load) 350W (Peak power on 200 $\Omega$ load)
<b>FREQUENCY</b>	4MHz(FDA, CE)
<b>INPUT VOLTAGE (Customer-Made)</b>	100/110/120/220/230/240 VAC, 50/60Hz
<b>TIME SELECTION</b>	Continuous, 1sec, 1/2sec, 1/4sec, 1/8sec
<b>POWER CONSUMPTION</b>	450 VA + 10% under on maximum load
<b>WEIGHT</b>	10 kg
<b>DIMENSION</b>	Main Unit : 225(W) X 300(L) X 155(H)mm

※ The specification is changeable without notice for product improvement.

**sometech®**  
[www.sometech.com](http://www.sometech.com)  
 Since 1989



ISO 9001



ISO 13485



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