

## Instructions for Use

Trade Name: Sugita Titanium Clip Single Shaft Applier DT

### Warning

1. Please read these instructions carefully prior to using this product. Product should be used according to these instructions and pay close attention to the safety of patients. Failure to follow manufacturer's recommendations may cause harm or injury to the patient.

#### For the US market

Do not reuse the device when it is used on a patient with or suspected of having Creutzfeldt-Jakob Disease (CJD) or variant CJD (vCJD).

#### For markets outside the US

When the device is used on a patient with or suspected of having CJD or vCJD, make sure to adhere to the most recent and updated restrictions available in each country and/or region for its reuse. Be cautious of the possibility of secondary infection. Refer to [www.a-k-i.org](http://www.a-k-i.org) or AAMI Standard ST79 for more information related to cleaning and sterilization.

2. Use with specified products only

Use this product only with Sugita Titanium Aneurysm Clips II. Failure to do so might damage the clip.

### Contraindication / Prohibition

1. Use for intended purpose only

Use devices for their intended purposes only. Incorrect use could cause this product to break.

2. Prohibition of use of chemicals

Avoid exposing this product to chemicals. Doing so could damage this product due to corrosion.

3. Prohibition of secondary processing of this product

Do not apply any secondary processing to this product. For example, do not apply impacts or vibration markings to the surface of this product. Doing so could break this product.

4. Handle with care

Handle this product with care, as it can be deformed or damaged. Rough handling could significantly reduce the service life of devices and appliances.

5. Prohibition of use of polishing powder and wire wool

When cleaning this product, do not attempt to polish its surfaces with rough polishing powder or wire wool. This could cause scratches on the surface of this product and result in rust or corrosion.

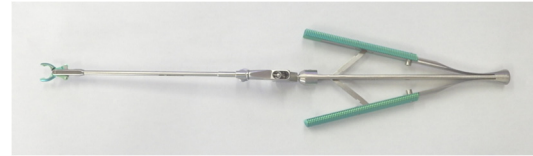
6. Prohibition of use of acid and household detergents

Use only medical neutral detergents (pH 6 to 8) to clean this product. Do not use any acid or household detergent. Washing this product with an improper detergent could result in discoloration or corrosion.

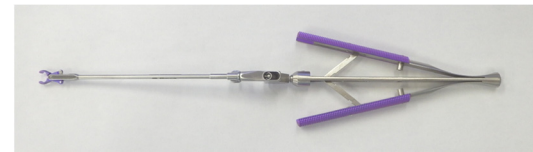
7. Do not use low temperature hydrogen peroxide gas plasma sterilization.

This product is not suitable for sterilization with hydrogen peroxide low temperature gas plasma. It may discolor the surface of the product or affect the feature of the product.

### Shape / Structure



Standard (green)



Mini (pink)

Code No	Product Description
17-012-81	Sugita Titanium Clip II Single Shaft Applier Standard, 50mm DT
17-012-82	Sugita Titanium Clip II Single Shaft Applier Standard, 90mm DT
17-012-83	Sugita Titanium Clip II Single Shaft Applier Standard, 110mm DT
17-012-84	Sugita Titanium Clip II Single Shaft Applier Standard, 50mm 30deg. DT
17-012-85	Sugita Titanium Clip II Single Shaft Applier Standard, 90mm 30deg. DT
17-012-86	Sugita Titanium Clip II Single Shaft Applier Standard, 110mm 30deg. DT
17-013-81	Sugita Titanium Clip II Single Shaft Applier Mini, 50mm DT
17-013-82	Sugita Titanium Clip II Single Shaft Applier Mini, 90mm DT
17-013-83	Sugita Titanium Clip II Single Shaft Applier Mini, 110mm DT
17-013-84	Sugita Titanium Clip II Single Shaft Applier Mini, 50mm 30deg. DT
17-013-85	Sugita Titanium Clip II Single Shaft Applier Mini, 90mm 30deg. DT
17-013-86	Sugita Titanium Clip II Single Shaft Applier Mini, 110mm 30deg. DT

Material: Titanium alloy, stainless steel

### Intended Purpose

This device is a surgical tool designed to apply Sugita Titanium Aneurysm Clips II.

### Instructions for use

Before using this product, inspect, wash, and sterilize in accordance with these instructions.

### CAUTIONS & WARNINGS

#### 1. WARNING

Device must be sterilized by users in accordance with our recommended sterilization procedures or the validated sterilization conditions for which validity has been proven by medical organizations in each country or region.

#### 2. Defect / Adverse event

Defect

- Corrosion or pitting caused by use of chemicals

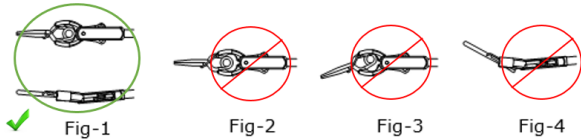
- Damage or breakage caused by the corrosion or pitting

#### Adverse event

- Broken pieces of metal from the damaged instrument falling into the patient.

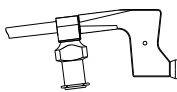
#### 3. Fundamental precautions

- (1) Please confirm that the clip is held securely in the slot of the gripping part of the forceps. (Fig-1)
- (2) If the clip is not held securely, the clip may slip or come loose from the forceps. This will also damage the spring part of the clip, and may break the spring. (Figs. 2, 3, and 4)
- (3) Do not hold the clip at a bent angle. (Figs. 3, 4)

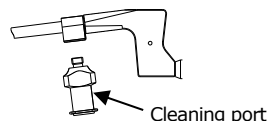


- (4) Please clean the product to remove the attached materials (dirt). Take extra care to clean the moving part (e.g. the joint) thoroughly.
- (5) This product is designed specifically for the Sugita Titanium Aneurysm Clips II. Do not use this product with clips made by other manufacturers or conventional cobalt alloy clips.
- (6) This product does not have a ratchet. Make sure the clip does not fall off from the forceps.
- (7) This product has a removable cleaning port. The cleaning port is attached to clean the lumen. When cleaning is complete, remove it. (Fig-5)

The cleaning port is attached to the lumen.



The cleaning port is removed from the lumen.



[Figure 5]

#### Storage / Life

1. Please store the device in normal ambient temperature areas. Do not store in areas of high humidity where the temperature may dramatically vary causing condensation. Do not store on or near chemicals as the chemicals may cause damage to the device.
2. Service life of this product: 5 years (Subject to following manufacturer's specified maintenance, inspection and proper storage requirements.)

#### Maintenance / Inspection

1. Check prior to each use  
Operational and functional checks  
Conduct daily and pre-operation checks of this product to make sure that it functions properly.
2. Check after each use
  - (1) Immediately wash with clean water
    - (1)-1 If exposed to bleach or antiseptic solutions, immediately wash:  
Wash and rinse with clean water immediately and immerse in neutral enzyme detergent to remove any bleach or antiseptic solution, which may contain chlorine or iodine and can damage the instrument. Manually remove contaminated matter by hand or with an ultrasonic-cleaner.
    - (1)-2 Further remove any remaining contamination with a plastic brush.

- (1)-3 Select a proper detergent for each decontamination method and maintain appropriate density and handling.
- (1)-4 Use a soft towel, a plastic brush, or a water jet for cleaning.
- (1)-5 To avoid damage, do not use a metal brush, coarse polishing agents, or apply excessive force when handling the device.
- (1)-6 Reverse osmosis water is recommended to wash this product.
- (1)-7 Only use reverse osmosis water for the final rinse.
- (1)-8 It is recommended to use a washer-disinfector for this device.
- (2) Fully dry this product immediately after washing it. Do not leave it wet for a longer time than necessary as residual water may damage the instrument.
- (3) Only use distilled or reverse osmosis water  
Use distilled or reverse osmosis water to wash this product.  
Residual chlorine and organic matters in tap water may cause stainings and/or rust and may damage the instrument.
- (4) Use a water-based anticorrosive lubricant  
Lubricating oil is completely removed by washing. After washing this product, apply a water-based, anticorrosive lubricant prior to sterilization.  
Do not use this product without applying anticorrosive lubricant on its sliding part. [Galling could occur.]
- (5) Maintenance
  - (5)-1 After cleaning, visually inspect under ambient lighting and confirm all dirt and debris has been removed.
  - (5)-2 If any dirt or debris is visible, repeat cleaning and lubrication steps.
  - (5)-3 Confirm that moving parts operate smoothly without binding, excessive force or moving parts appear to be loose and are rattling.

<Mizuhu recommends the following procedures>

- (1) Cleaning preparation
  - 1) When handling devices contaminated with blood or bodily fluids, wear appropriate protective equipment such as masks, gloves, eye protection, and waterproof aprons.
  - 2) Do not allow blood or bodily fluids on devices to dry.
  - 3) The instrument is fragile so handle carefully throughout the cleaning and sterilization process so that the instrument and its tips are not damaged.
- (2) Cleaning  
This product should be cleaned in the sequence of <Manual Procedure > and <Automated Procedure > as described below. Not doing so may result in insufficient cleaning.  
<Manual Procedure>
  - 1) Soak the product in cold tap water for 5 minutes, covering all surfaces, and confirm that the lumen is filled with water.
  - 2) Before re-attaching the cleaning port to the product, rinse with tap water and clean with a plastic brush until all visible residue is removed from the surface of the instrument. Be especially careful to clean the connecting part of the cleaning port and the product, upon completion re-attach the cleaning port to the product. Carefully wash hinges, bonded parts, the lumen, and other hard-to-reach areas, spray with cold tap water with a water gun (at a maximum of 2 bars of water pressure) for 20 seconds.
  - 3) Place the product into its washing basket and ultrasonically clean at room temperature for 10 minutes in deionized water with a neutral enzyme

detergent dissolved to establish a 0.5% detergent solution.

- 4) Carefully wash hinges, bonded parts, the lumen, and other hard-to-reach areas, spray with cold tap water with a water gun (at a maximum of 2 bars of water pressure) for 20 seconds.

<Automated Procedure>

Use a washer rack intended for cleaning the lumen.

- 1) Perform pre-cleaning for 2 minutes using tap water.
- 2) Drain the water.
- 3) Clean for 5 minutes in 55°C tap water with 0.3% alkaline detergent solution.
- 4) Drain the water.
- 5) Rinse for 3 minutes with distilled or deionized water.
- 6) Drain the water.
- 7) Rinse for 2 minutes with distilled or deionized water for the final rinse.
- 8) Drain the water.
- 9) Thermal Disinfection can be used by following the manufacturer's defined parameters;  
Thermal Disinfection Band: 90-93°C/194.0-199.4°F,  
5-10 minutes (A0 value: 3000-12000)  
(reference EN ISO 15883-1)
- 10) Thoroughly dry prior to use or storage.
- 11) After cleaning, remove the cleaning port and store it until next cleaning procedure.

- (3) Only use a water-based, anticorrosive lubricant  
Lubricating oil is completely removed by washing. Do not use without lubricant oil to any sliding parts, or galling could occur. After washing this product, apply a water-based anticorrosive lubricant prior to sterilization.

3. Sterilization

- 3.1 Remove the cleaning port before sterilizing the product.
- 3.2 Device must be sterilized by users in accordance with our recommended sterilization procedures or using packaging materials for sterile products and the validated sterilization conditions for which validity has been proven by medical organizations in each country or region.

The recommended sterilization parameters are as follows,

Sterilization method	Pre-vacuum steam sterilization (Autoclave sterilization)	
	Sterilization temp.	Retention time
Sterilization conditions	132°C / 269.6°F	4 min
	134°C / 273.2°F	3 min

**For the US market**

FDA has not approved or cleared medical devices, including sterilizers, for the intended use of reducing the infectivity of TSE agents (i.e., prions).

**For markets outside the US**

When the device is used on a patient with or suspected of having CJD or vCJD, make sure to adhere to the most recent and updated restrictions available in each country and/or region for its reuse.

**Maintenance and check by agents**

For safety use of this instrument, conduct periodic checks by the manufacturer or the agent recognized by the manufacturer.

Maintenance and check by other agents could cause the adverse events and the decrease of the performance and the function. To schedule the periodic check, contact your local distributor or the manufacturer.

**Packing**

1 piece per pack

**Matters related to warranty period**

MIZUHO Corporation will repair defective parts of this product without charge for one year from the date of delivery/installment except for cases of damage caused by a third party's repair, act of nature, improper use or intentional damage. All other warranty terms and conditions are subject to regulations of MIZUHO Corporation.

**Name and address of manufacturer**



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