

**Intracavitary HDR Brachytherapy**

# **CT Compatible FSD T&O Applicator**

**Innovative Technology and Enhanced Clinical Advantages!  
Facilitates CT and MRI based Brachytherapy Planning!  
Independent Tandem Locking Device and  
Adjustable Rectal Retractor.**

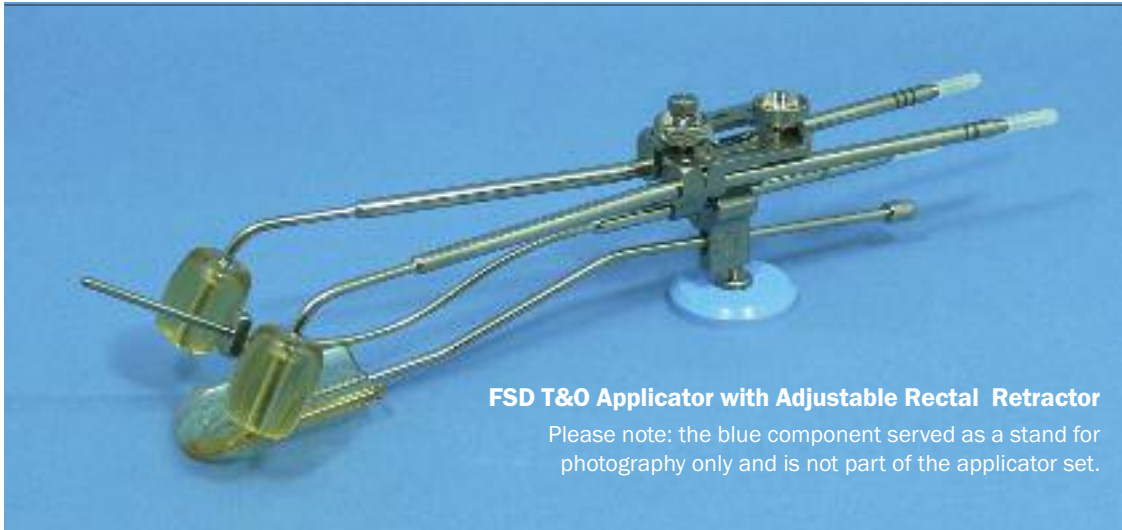


Model Shown: FSD T&O Applicator - GammaMed® / VariSource®

# FSD T&O APPLICATOR SET

COMPATIBLE WITH ALL OF TODAY'S REMOTE AFTERLOADING SYSTEMS

VARISOURCE® • GAMMAMED® • MICROSELECTRON® • MULTISOURCE® AND OTHERS.



**FSD T&O Applicator with Adjustable Rectal Retractor**

Please note: the blue component served as a stand for photography only and is not part of the applicator set.

**VARIAN**  
**GammaMed®**  
**VariSource®**  
CAT. # 0612

**NUCLETRON**  
**MicroSelectron®**  
CAT. # 0819

**IBt-BEBIG GROUP**  
**MultiSource®**  
CAT. # 0817

## DESCRIPTION:

The CT compatible FSD T&O Applicator follows the traditional design and concept of a Fletcher-Suit-Delclos Tandem and Ovoid Cervix Applicator which includes a left and a right colpostat, a set of various length tandems and a set of ovoids of different sizes. A connecting bracket holds the three components together and allows for each of the components to be securely locked in place.

A new design feature of the connecting bracket allows for the tandem to be locked in place independently after the placement of the ovoids in the vaginal fornices. Once locked in place, the tandem is rigidly kept in place between the ovoids. Longitudinal and lateral positioning of the tandem remains unrestricted thus providing excellent flexibility and adaptation to anatomical conditions.

The FSD T&O Applicator is entirely constructed of high-grade Titanium approved for medical use.

The FSD T&O Applicator Set is provided in a sterilization cassette which can be AUTOCLAVED.

## CONNECTING BRACKET

The connecting bracket contains 3 knurled locking knobs; the small diameter knob locks the tandem in place while the other two larger knobs secure the spread between the ovoids. The rectal retractor has two knobs, one to secure it in place and the other to adjust the retractor's paddle.



## BARREL-SHAPED OVOIDS



### Diameters

- 3.0 CM (Top)
- 2.5 CM (Center)
- 2.0 CM (Bottom)

Three pairs of ovoids are part of the set. Ovoids are "unshielded" and are made of Polysulfone. The ovoids are threaded onto the colpostats and they are AUTOCLAVEABLE.

## Intrauterine Tandems

2 cm, 4 cm, 6 cm and 8 cm



## INTRAUTERINE TANDEMS

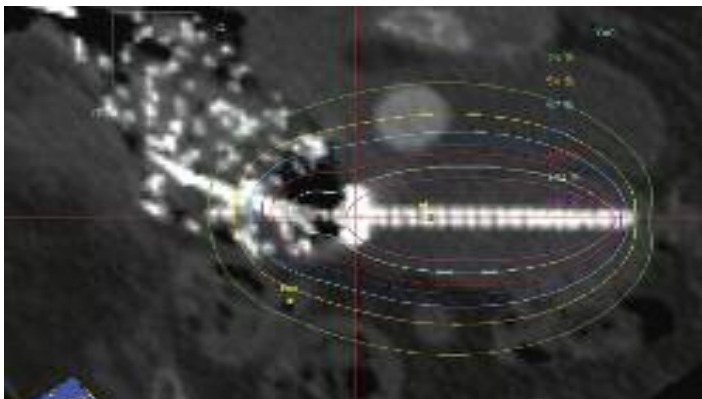
Four tandems are provided per set. Each having the exact same overall length whereas the intrauterine component varies incrementally; 2cm, 4cm, 6cm and 8cm. Tandems are constructed of three major components; the 3mm diameter intrauterine tube, the 6mm outer tube and a connector compatible with the afterloader in use. All tandems are marked with a "T" to signify that the part is made of Titanium. All tandems are provided with a groove at the proximal end to indicate the angulation of the tandem.

# FSD T&O APPLICATOR SET

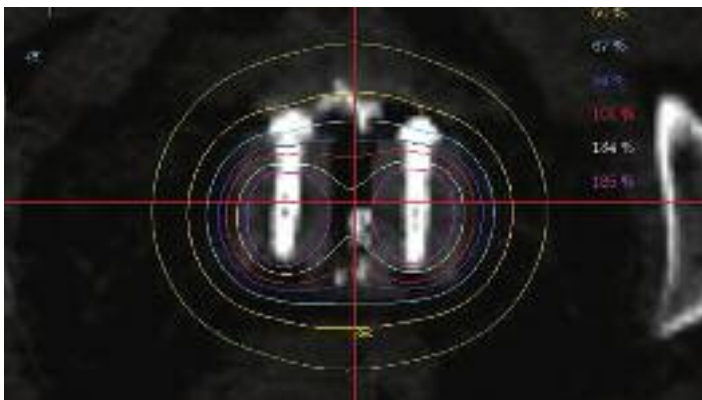
## CT Images

In-situ CT images demonstrate high quality, streak-free images for planning purposes.

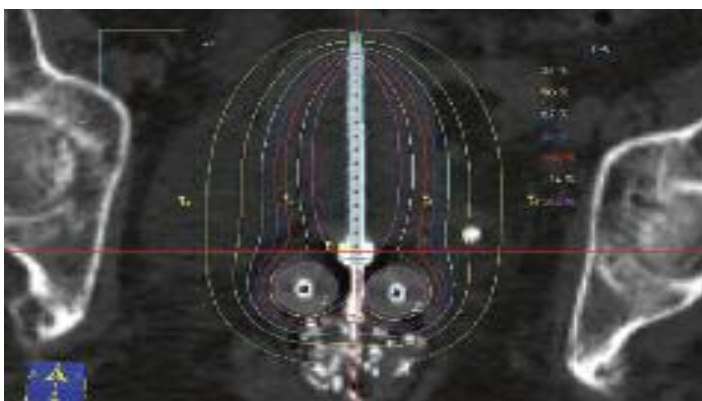
### SAGITTAL VIEW WITH DOSE DISTRIBUTION



### AXIAL VIEW WITH DOSE DISTRIBUTION



### A/P VIEW WITH DOSE DISTRIBUTION



Images provided by John Wolfgang -  
Massachusetts General Hospital Harvard School, MA

## FEATURES

- FSD T&O Applicator is CT / MRI Compatible
- High-Quality - Streak-free CT Images for Planning
- Lightweight yet Sturdy and Rigid
- Entirely made of Medical Grade Titanium
- Anatomically Versatile, Non-bulky Construction
- Provides Dose Distribution Flexibility & Adjustability
- Physician-friendly; Easy Assembly and Disassembly
- Packing may be Obviated using the Rectal Retractor
- Custom Fitted to any of Today's Remote Afterloaders
- Useable with CT Compatible Smit Sleeves (Optional)
- The FSD T&O Applicator can be AUTOCLAVED

## THE FSD T&O APPLICATOR SET CONSIST OF:

- 2 ea COLPOSTAT, 60° (left & right)
- 6 ea OVOIDS, 2.0cm, 2.5cm, 3.0cm (2 of each)
- 4 ea TANDEM, 2.0cm, 4.0cm, 6.0cm and 8.0cm
- 1 ea ADJUSTABLE CERVICAL STOP
- 1 ea SPACING BRACKET (left and right)
- 2 ea SPACING BRACKET LOCK KNOBS
- 1 ea TANDEM LOCK KNOB
- 1 ea RECTAL RETRACTOR WITH PADDLE
- 1 ea RETRACTOR ATTACHMENT KNOB
- 1 ea RETRACTOR ADJUSTMENT KNOB
- 1 ea ALLEN WRENCH
- 1 ea ST. STEEL RULER, 15cm
- 1 ea STERILIZATION CASSETTE
- 1 ea INSTRUCTION MANUAL

## STERILIZATION PROCEDURE:

Autoclave Instructions for Titanium & Polysulfone Components  
Expose the applicator with sterilization caps in place to the following steam cycle:

Temperature:	132° C (Gravity Displacement)
Exposure Dwell:	20 minutes
Drying:	15 minutes

NOTE: This sterilization protocol was validated  
double wrapping each cassette in CSR wrap.

## MATERIALS USED IN FSD T&O APPLICATORS

Applicator:	Exclusively Titanium
Rectal Retractor:	Polysulfone / Titanium

**CAUTION:** Do not interchange components from similar metallic applicators with the Mick CT FSD T&O Applicator.

All components of the CT FSD T&O are made of Titanium and each component is clearly marked with a "T" indicating that the part is made of Titanium.

# CT-HDR/LDR INTRACAVITARY APPLICATORS

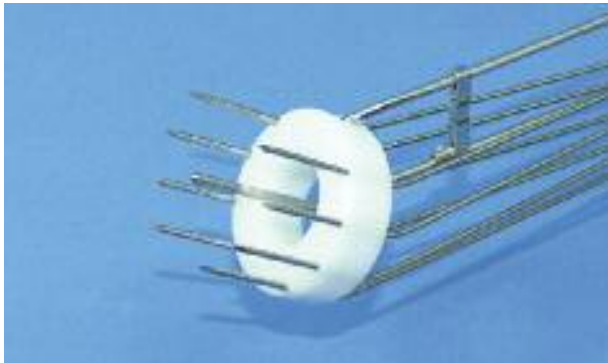
CT - GYN APPLICATORS ARE SPECIFICALLY DESIGNED FOR CT AND MRI COMPATIBILITY.



CT Split Ring Applicator with Rectal Retractor



CT Henschke Applicator with Rectal Retractor (Unshielded)



CT Vienna System with Titanium Needles



CT MAC Interstitial GYN Template



CT Miami Multi-Channel Vaginal / Cervical Applicator



Shielded Vaginal / Cervical Applicator with Support Arm



CT Segmented Vaginal / Cervical Applicator



CT LDR Henschke T & O Applicator