

**Intracavitary HDR Applicators**

# **CT Compatible Split-Ring Applicator**

**Innovative Technology and Enhanced Clinical Advantages!**

**Facilitates CT and MRI based Brachytherapy Planning!**

**Offers Optimal Target Delineation while**

**Minimizing the Dose to Organs at Risk!**



**GammaMed / VariSource Version**

# HDR SPLIT-RING APPLICATOR SET

COMPATIBLE WITH ALL OF TODAY'S REMOTE AFTERLOADING SYSTEMS

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



**VARIAN**  
GammaMed®  
VariSource®  
CAT. # 0605

**NUCLETRON**  
MicroSelectron®  
CAT. # 0840

**IBt-BEBIG**  
MultiSource®  
CAT. # 0805

CT Split-Ring Applicator with Rectal Retractor

## DESCRIPTION:

The CT / MR Compatible **Split-Ring** Applicator is entirely made of high-grade medical Titanium and manufactured in accordance to ISO standards. Materials used in the Applicator are certified. The Split-Ring Applicator's design criteria is foremost based upon simplicity and ease of use for the clinician following the traditional teachings to insert the tandem first and the left and right colpostat thereafter. The 3 components connect to the connecting bracket effortlessly. Once in place, the colpostat or half-rings can be kept together to form a ring or spread laterally mimicking the traditional T/O Applicators. Symmetry between tandem and colpostats can be maintained independently of the spread which simplifies planning. However, asymmetry can be achieved as well. The lateral positions of the colpostats can be incrementally adjusted in 5mm steps. Each step is clearly marked on the spacing bracket while indentations provide for a definite lateral setting or spread. Once the insertion is completed, all components are securely locked in place by means of three knurled knobs. If so desired, the rectal retractor can be attached to the tandem of the applicator in order to forgo packing.

The Split-Ring Applicator provides flexibility yet rigidity unprecedented in any of today's available HDR-GYN Applicators.

The **Split-Ring** Applicator shown with the lateral half-rings in closed position mimicking the Ring Applicators. Since the Ring is split in the center, the colpostats can be spread laterally.



The **Split-Ring** Applicator's Colpostats can be spread incrementally at 5 mm. The maximum lateral spread is 8.0 cm. Each setting is defined and once positioned, the Colpostats can be locked in place securely by means of the 2 Colpostat Locking Knobs.



## Spacing Bracket Assembly

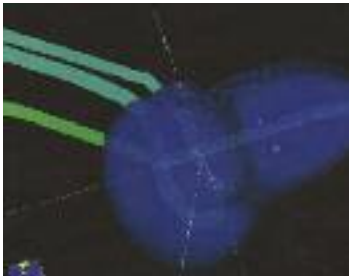
Unique in design is the Spacing Bracket Assembly. Clearly indicated by lines and a series of indentations (dots), the spread of the colpostats can be readily visualized. When set at one dot, the colpostats form a closed ring with a spread of 38mm. At 2 dots, the colpostats are spread 48mm; 3 dots = 58mm and 4 dots = 68mm. When closed completely, the maximum spread = 80mm.

Please note: dimensions given herein are nominal and they represent the location of the source, not the OD of the ring.

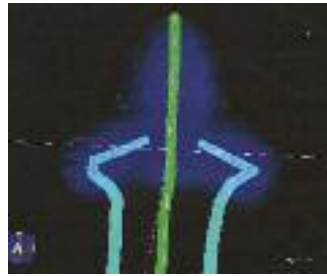
# HDR SPLIT-RING APPLICATOR SET

## A/P and Sagittal Dose Clouds and Dose Distributions

Sagittal Dose Cloud



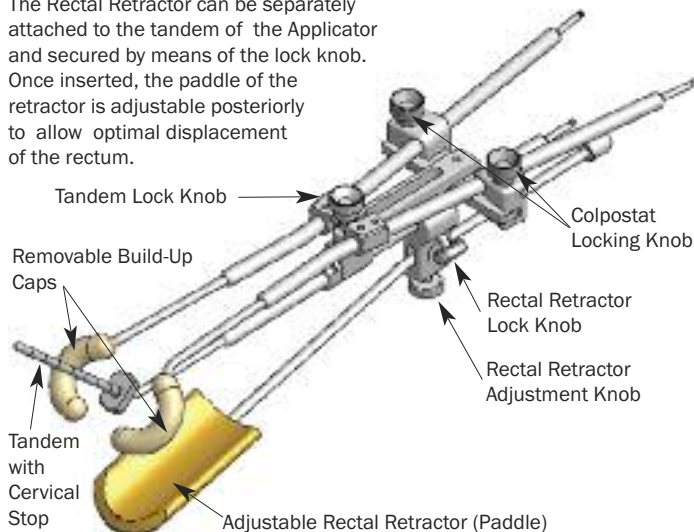
AP Dose Cloud



## Sagittal / AP Dose Distributions



The Rectal Retractor can be separately attached to the tandem of the Applicator and secured by means of the lock knob. Once inserted, the paddle of the retractor is adjustable posteriorly to allow optimal displacement of the rectum.



**CAUTION:** Do not interchange components from similar metallic applicators with the Mick CT Split-Ring Applicator.

All components of the CT Split-Ring Applicator are made of Titanium and each component is clearly marked with a "T" indicating that the part is made of Titanium.

**The Split-Ring Applicator is UNSHIELDED.**

## Features

- Split-Ring Applicators are CT / MRI Compatible
- High Quality - Streak-free CT Images for Planning
- Lightweight yet Sturdy and Rigid (Entirely made of Titanium)
- Anatomically Versatile, Non-bulky Construction
- Facilitates Insertion in Patients with a Narrow Introitus
- Provides Dose Distribution Flexibility & Adjustability
- Reproducible Geometries
- Choice of Symmetric or Asymmetric Colpostat Separations
- Individual Insertion of Right and Left Colpostat
- Physician Friendly - Easy Assembly and Disassembly
- Packing may be Obviated with the Use of the Rectal Retractor
- Can be Custom Fitted to any of Today's Remote Afterloaders
- Available with CT Compatible Smit Sleeves
- The Split-Ring Applicator can be Autoclaved

## Compatible Remote Afterloading Systems

<b>Varian -</b>	<b>GammaMed® / VariSource®</b>	<b>Catalog # 0605</b>
<b>Nucletron -</b>	<b>MicroSelectron®</b>	<b>Catalog # 0840</b>
<b>IBt-BEBIG -</b>	<b>MultiSource®</b>	<b>Catalog # 0805</b>

## The Split-Ring Applicator Set Consists Of:

• Colpostat - left	1 ea
• Colpostat - right	1 ea
• Tandem - 2cm x 45 degrees	1 ea
• Tandem - 4cm x 45 degrees	1 ea
• Tandem - 6cm x 45 degrees	1 ea
• Tandem - 8cm x 45 degrees	1 ea
• Build-up Cap - 10.0mm (diameter)	2 ea
• Build-up Cap - 15.0mm (diameter)	2 ea
• Connecting Bracket	1 ea
• Tandem Lock Knob	1 ea
• Colpostat Locking Knob	2 ea
• Cervical Stop	1 ea
• Allenwrench (Stainless Steel)	1 ea
• Rectal Retractor	1 ea
• Rectal Retractor Lock Knob	1 ea
• Stainless Steel Ruler (15cm)	1 ea
• Sterilization Tray	1 ea
• Instructions for Use	1 ea

## Materials used in Split-Ring Applicators

Applicator:	Exclusively Titanium
Rectal Retractor:	Polysulfone / Titanium
Build-up Caps:	Silicone Rubber

## The Split-Ring Applicator can be AUTOCLAVED!

### Sterilization Procedure:

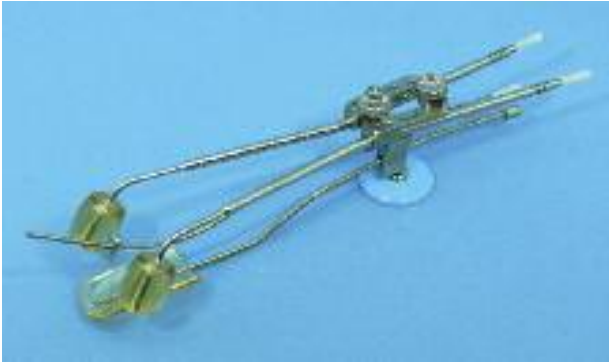
Autoclave Instructions (for Titanium & Silicone rubber parts)  
Expose the applicator with sterilization caps in place to the following steam cycle:

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

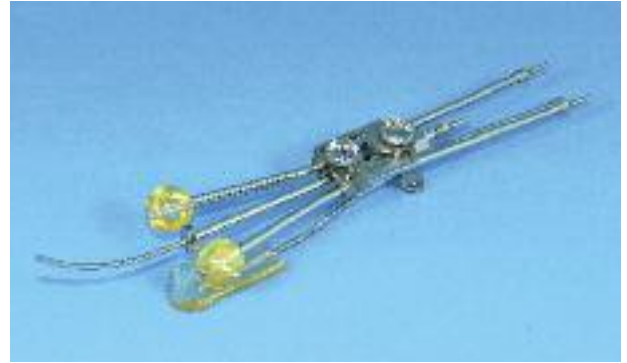
NOTE: This sterilization protocol was validated double wrapping each cassette in CSR wrap.

# CT-HDR / LDR INTRACAVITARY APPLICATORS

CT - GYN Applicators are specifically designed for CT and MRI compatibility.



CT FSD Applicator with Rectal Retractor (Unshielded)



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