

Brachytherapy applicators

and accessories



Nucletron
AN ELEKTA COMPANY

Introduction

At Nucletron, we believe that our solutions, services and extensive knowledge of precisely targeted radiotherapy can play a vital role in the successful treatment of cancer. Our key technological advances have resulted in an integrated package of treatment planning and delivery systems. This Nucletron Applicator Guide provides a comprehensive overview of our applicator portfolio for brachytherapy.

Nucletron Brachytherapy Solutions

With 35 years of experience, Nucletron is currently the preferred partner for about 60% of brachytherapy institutions worldwide! Continuous research and development in close collaboration with our customers allow us to find comprehensive and smart solutions to clinical needs, and to remain at the forefront of brachytherapy. We continue to build on this with our global presence and an ongoing investment in brachytherapy innovation.

Nucletron Applicators

Applicators are a pivotal part of Nucletron's fully integrated solutions. With a broad portfolio of specialized applicators, Nucletron offers a complete and customer-focused applicator range for more than 15 types of cancer in a variety of anatomies.

Flexitron® and microSelectron® Remote Afterloading platforms

Nucletron has established an unparalleled reputation for reliability, safety and performance in treatment delivery. The groundbreaking software architecture of our remote afterloading platforms combines these qualities with all-in-one versatility and unmatched flexibility.

Flexitron® is the newest afterloading platform in the market, offering unrivalled innovation potential. Due to its extra source drive, it offers future possibilities for advanced brachytherapy techniques. The design of Flexitron® was strongly driven by customer input, paying close attention to safety and quality of patient treatment. MicroSelectron® Digital provides a platform for HDR brachytherapy that synergizes all the benefits of a safe and reliable treatment solution, proving its worth on a daily basis in hundreds of brachytherapy institutes around the world.

Oncentra® Brachy

The Oncentra Brachy treatment planning platform enhances workflows by reducing planning time by up to 50%, while delivering the highest levels of accuracy and confidence in treatment. Nucletron's advanced brachytherapy software also addresses the call for reproducibility. It leverages Applicator Modeling, allowing automatic reconstruction of the exact applicator geometry and source path, and library plans to ensure efficiency and consistency.



In this Applicator Guide, applicators are presented by body site. All body sites are easily identified by color coding. Where a particular applicator can also be used for other body sites, a cross reference is given on the index-page at the start of the relevant applicator section.

The applicators and accessories in this guide are designed for use with the Nucletron Flexitron® and microSelectron® afterloaders only. Applicators and accessories that are specific to one or other afterloader are so indicated. Corresponding transfer tubes, x-ray catheters and CT-markers per applicator (type) and afterloader can be found on page 118 and 120.

Sterilization advice

Sterilization advice provided in this document is indicative and applies to newly purchased applicators. For more information regarding sterilization of a particular applicator, please consult the User Manual or Sterilization Advice Chart. The latest version of this document is leading and can be downloaded from www.nucletron.com/applicators*

Safety in the Magnetic Resonance Environment

The symbols shown below are used to indicate safety safety of medical devices in the Magnetic Resonance environment.



MR Safe - an item that poses no known hazards in all MR environments.



MR Conditional - an item that has been demonstrated to pose no known hazards in a specified MR environment with specified conditions of use (specified in the user manual).

- * Register for a 'My Nucletron' account. The documentation can be found in the Resource Library.
- For information about applicators that are not mentioned in this brochure, please contact your local sales office.
 - Availability of products presented in this guide is subject to local regulatory approval.

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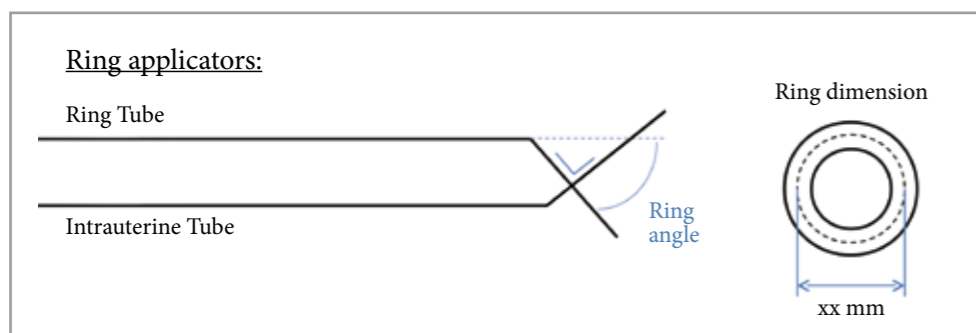
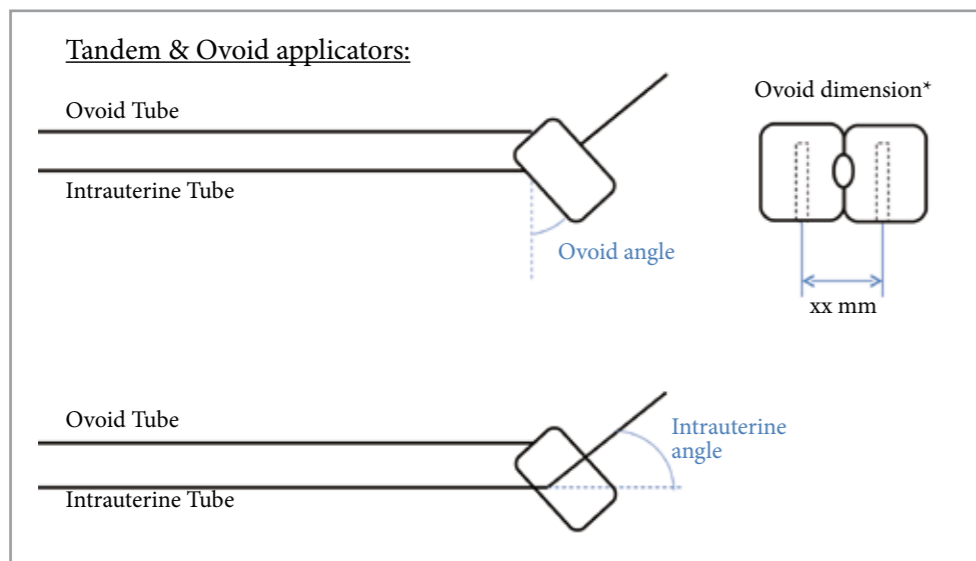
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Visit www.nucletron.com/applicators for the most up-to-date Applicator overview.

Guide to Gynecology applicator dimensions



* The dimensions are applicable to all applicators, with the exception of the Cervix Rotterdam Applicator. Refer to relevant page for ovoid dimensions of this applicator.

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Utrecht Interstitial CT/MR Applicator Set

- Making complex treatments fast and easy
- Targeted dose optimization
- Seamless integration with Oncentra Brachy treatment planning



Applicable body sites:

- Cervix
- Endometrium



Image shows the applicator with the Intrauterine Tube with 4 mm diameter.

The Utrecht Interstitial CT/MR Applicator Set has been specifically developed for combined intracavitary / interstitial treatment of gynecologic cancers, with a combination of intracavitary and interstitial brachytherapy. Its design is based on the Fletcher CT/MR Applicator Set, and uses the ovoids as a template for interstitial needle placement. High-quality ProGuide needles are easily inserted through guiding tubes when the applicator is in place. The insertion depth of the needles can be controlled using the insertion tool. They are individually locked in place for treatment. Through the combination of intracavitary and interstitial functionality, optimally conformal cervical and parametrial dose coverage can be achieved.

“Combined intracavitary/interstitial brachytherapy for cervical cancer not only provides the possibility to increase the target volume dose but also to reduce the dose to organs at risk”

Ina Jürgenliemk-Schulz
University Medical Center, Utrecht, the Netherlands

Order Information

Utrecht Interstitial CT/MR Applicator Set (6 mm)
part # 110.270A01

Part Number	Description
189.735	Ovoid Tube 1
189.740	Ovoid Tube 2
189.739	Intrauterine Tube 15°
189.745	Intrauterine Tube 30°
110.240	Interstitial ovoid Pair 15 mm, 15°
110.241	Interstitial ovoid Pair 20 mm, 15°
110.242	Interstitial ovoid Pair 25 mm, 15°
110.243	Interstitial ovoid Pair 30 mm, 15°
189.714	Insertion Tool
110.268	Obturator Set (Set of 5)
189.751	Rectal Retractor 40
189.742	Rectal Retractor 30
189.741	Fixation Nut for Rectal Retractor
189.722	Fixation mechanism
189.750	Fixation clip
189.930	Fixation nuts Set (spare) (Set of 5)
101.012	Sterilization Caps (pack of 50)
110.267	Cervical Stopper
110.283	Screwdriver for Ovoids and Stopper
008.033	Plastic Screw M5 PPSU (10 pcs)
189.040	Cleaning brush Set
189.043	Cleaning brush Set

Utrecht Interstitial CT/MR Applicator Set (4 mm)
Part # 110.270A02

The same Utrecht Interstitial Applicator Set, but featuring ø 4 mm Intrauterine Tubes

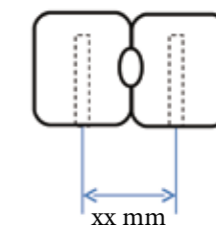
Accessories

Part Number	Description
110.230*	ProGuide Round Needle Set, 6F x 294 mm (Set of 5, single packed, delivered sterile)
110.232*	Guiding Tube for Ovoids (Set of 5, single packed, delivered sterile)
189.769	Intrauterine Tube, diameter 6 mm, 45°
110.296/298/300	Intrauterine Tube, d=4 mm, 15°/30°/45°
110.272	Interstitial Ovoid Set 25° (15 mm, 20 mm, 25 mm, 30 mm)
101.031	Fixation Mechanism for Ovoid Tubes
189.566**	Smit Sleeves CT/MR (box of 10, l=40 mm, d=9 mm)
110.700	5 pins for Adjustable Mechanism
189.894	Spare part set Plastic Screw M5 PPSU (10 pcs)
189.724	Fixation part 1

* Required for interstitial treatment.

** For more options, refer to last page of the Gynecology section.

Indication of ovoid dimensions of Utrecht Interstitial CT/MR Applicator



- Can also be used as a standard intracavitary applicator.
- Asymmetrical ovoid placement is possible.
- Use of needles with rounded tip can reduce the risk of perforation of critical structures, and is recommended for use with interstitial cervix applicators.
- The applicator can be sterilized using steam sterilization.
- User manual 777.00077.

Fletcher CT/MR Applicator Set

- Optimized fit with patient anatomy
- Compatible with CT and MR imaging



Applicable body sites:

- Cervix
- Endometrium



The Fletcher CT/MR Applicator is an unshielded design, using Fletcher-type dose patterns, for the treatment of cervical cancer. It can be used in combination with CT or MR imaging for treatment planning purposes. The adjustable geometry of the Fletcher CT/MR Applicator ensures an optimal fit with the patient's anatomy. The Intrauterine Tube features a centimeter scale to control the insertion depth. The adjustable stopper can be set between 10 and 80 mm.

Order Information

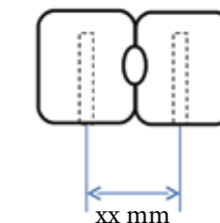
Fletcher CT/MR Applicator Set, part # 189.730

Part Number	Description
189.735	Ovoid Tube 1
189.740	Ovoid Tube 2
189.739	Intrauterine Tube 15°
189.745	Intrauterine Tube 30°
189.783	Ovoid Pair 15 mm (half-ovoids)
189.754	Ovoid Pair 20 mm
189.755	Ovoid Pair 25 mm
189.756	Ovoid Pair 30 mm
189.757	Ovoid Pair 35 mm
189.758	Ovoid Pair 40 mm
189.742	Rectal Retractor 30 mm
189.751	Rectal Retractor 40 mm
189.741	Fixation Nut for rectal retractor
110.267	Cervical Stopper
189.722	Adjustable Fixing Mechanism
189.750	Fixation Clip
198.930	Set of 5 fixation nuts (spare)
008.033	Plastic Screw M5 PPSU (10 pcs)
110.283	Screwdriver for ovoids and stopper
101.012	Sterilization Caps (pack of 50)

Accessories

Part Number	Description
110.296/.298/.300	Intrauterine Tube, d=4 mm, 15°/30°/45°
189.566	Smit Sleeves CT/MR (box of 10)
189.769	Intrauterine Tube 45°
101.031	Ovoid Tube Fixing Mechanism
101.015	Sterilization Box
189.900	Ovoid Set with radius 12.5 mm (25, 30, 35, 40 mm)
189.901	Ovoid Set with radius 15 mm (30, 35, 40 mm)
110.700	5 Pins for Adjustable Mechanism of Fletcher CT/MR Applicator
110.271	Utrecht Interstitial Applicator Complimentary Set, to expand the use of the Fletcher CT/MR applicator to interstitial treatments.
189.894	Spare part set Plastic Screw M5 PPSU (10 pcs)

Indication of ovoid dimensions of Fletcher CT/MR Applicator



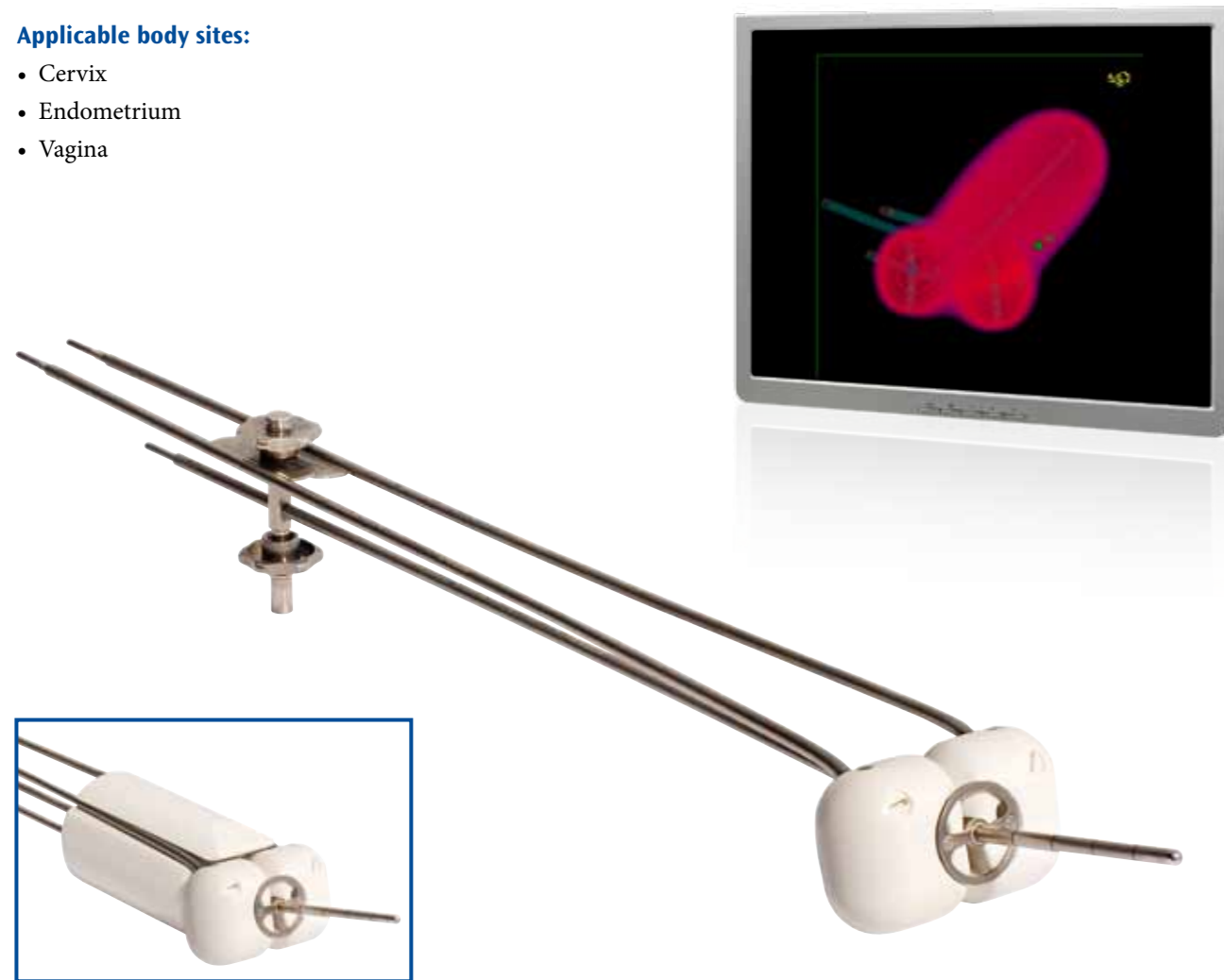
- The separate Utrecht Interstitial Applicator Complementary Set (110.271) contains all components to add interstitial functionality to a Fletcher CT/MR applicator and thereby upgrade it to the state-of-the-art Utrecht Interstitial CT/MR applicator.
- Asymmetrical ovoid placement is possible.
- The applicator can be sterilized using steam sterilization.
- User manual 090.713.

Cervix Rotterdam Applicator Set

- Fast treatment planning through fixed geometry
- Strong and lightweight applicator
- Modular design

Applicable body sites:

- Cervix
- Endometrium
- Vagina



* Optional vaginal cylinder parts can be added to extend dosimetry reach.

The titanium Cervix Rotterdam Applicator has been designed to support fast and safe treatment delivery. The easy and stable insertion system, combined with its fixed geometry, ensures precise and reproducible positioning of the lightweight applicator, and seamless integration with Oncentra Brachy. It can be easily re-inserted into the cervix using the Smit Sleeve. With the optional vaginal cylinder you can easily extent the treatment to include the vaginal wall in the same treatment fraction.

Order Information

Cervix Rotterdam Appl. Set IU-15° titanium, part # 137.218

Part Number	Description
137.235	Right ovoid Tube I, IU-15° (ti)
137.236	Left ovoid Tube III, IU-15° (ti)
137.191	Ovoid Pair, Ø 20 mm, small
137.192	Ovoid Pair, 25 mm, medium
137.193	Ovoid Pair, 30 mm, large
137.230	Intrauterine Tube IIII, IU-15°, L=30 mm, (ti)
137.232	Intrauterine Tube IIII, IU-15°, L=50 mm, (ti)
137.234	Intrauterine Tube IIII, IU-15°, L=70 mm, (ti)
137.246	Ovoid Tube coupling for 15°, for ovoids only (ti)
137.570	Closing caps (25/pack)
137.574	Screwdriver for ovoid screws

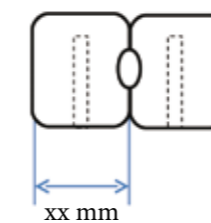
Cervix Rotterdam Appl. Set IU-30° titanium, part # 137.206

Part Number	Description
137.248	Right ovoid Tube I, IU-30° (ti)
137.249	Left ovoid Tube III, IU-30° (ti)
137.191	Ovoid Pair, Ø 20 mm, small
137.192	Ovoid Pair, 25 mm, medium
137.193	Ovoid Pair, 30 mm, large
137.251	Intrauterine Tube IIII, IU-30°, L=30 mm, (ti)
137.253	Intrauterine Tube IIII, IU-30°, L=50 mm, (ti)
137.255	Intrauterine Tube IIII, IU-30°, L=70 mm, (ti)
137.256	Ovoid Tube coupling for 30°, for ovoids only (ti)
137.570	Closing caps (25/pack)
137.574	Screwdriver for ovoid screws

Cervix Rotterdam Appl. Set IU-45° titanium, part # 137.217

Part Number	Description
137.219	Right ovoid Tube I, IU-45° (ti)
137.220	Left ovoid Tube III, IU-45° (ti)
137.191	Ovoid Pair, Ø 20 mm, small
137.192	Ovoid Pair, 25 mm, medium
137.193	Ovoid Pair, 30 mm, large
137.222	Intrauterine Tube IIII, IU-45°, L=30 mm, (ti)
137.224	Intrauterine Tube IIII, IU-45°, L=50 mm, (ti)
137.226	Intrauterine Tube IIII, IU-45°, L=70 mm, (ti)
137.247	Ovoid Tube coupling for 45°, for ovoids only (ti)
137.570	Closing caps (25/pack)
137.574	Screwdriver for ovoid screws

Indication of ovoid dimensions of Cervix Rotterdam applicator



- The applicator can be sterilized using steam sterilization.
- User manual 777.00114.

Accessories for 15° Set

Part Number	Description
137.245	Vaginal cylinder locking pin (ti)
137.237	Vaginal cylinder & cap 15°, Ø 30 mm, L=60 mm
137.207	Vaginal cylinder & cap 15°, Ø 37 mm, L=60 mm
137.238	Vaginal cylinder & cap 15°, Ø 40 mm, L=60 mm

Accessories for 30° Set

Part Number	Description
137.245	Vaginal cylinder locking pin (ti)
137.299	Vaginal cylinder & cap 30°, Ø 30 mm, L=60 mm
137.257	Vaginal cylinder & cap 30°, Ø 37 mm, L=60 mm
137.239	Vaginal cylinder & cap 30°, Ø 40 mm, L=60 mm

Accessories for 45° Set

Part Number	Description
137.245	Vaginal cylinder locking pin (ti)
137.240	Vaginal cylinder & cap 45°, Ø 30 mm, L=60 mm
137.228	Vaginal cylinder & cap 45°, Ø 37 mm, L=60 mm
137.241	Vaginal cylinder & cap 45°, Ø 40 mm, L=60 mm

Accessories for all Cervix Rotterdam Applicators

Part Number	Description
137.244	Rectal spacer locking pin (ti)
137.243	Rectal spacer, 30 mm wide, 5 mm spacing under ovoid
137.242	Rectal spacer, 30 mm wide, behind ovoid
137.190	Mini ovoid Pair, 15 mm
137.577	Spare ovoid screws (Set of 5 pcs)
189.676	Smit Sleeves CT/MR for Ti Intrauterine Tube, L=20 mm and longer, D=6 mm (box of 10 pcs) and following *

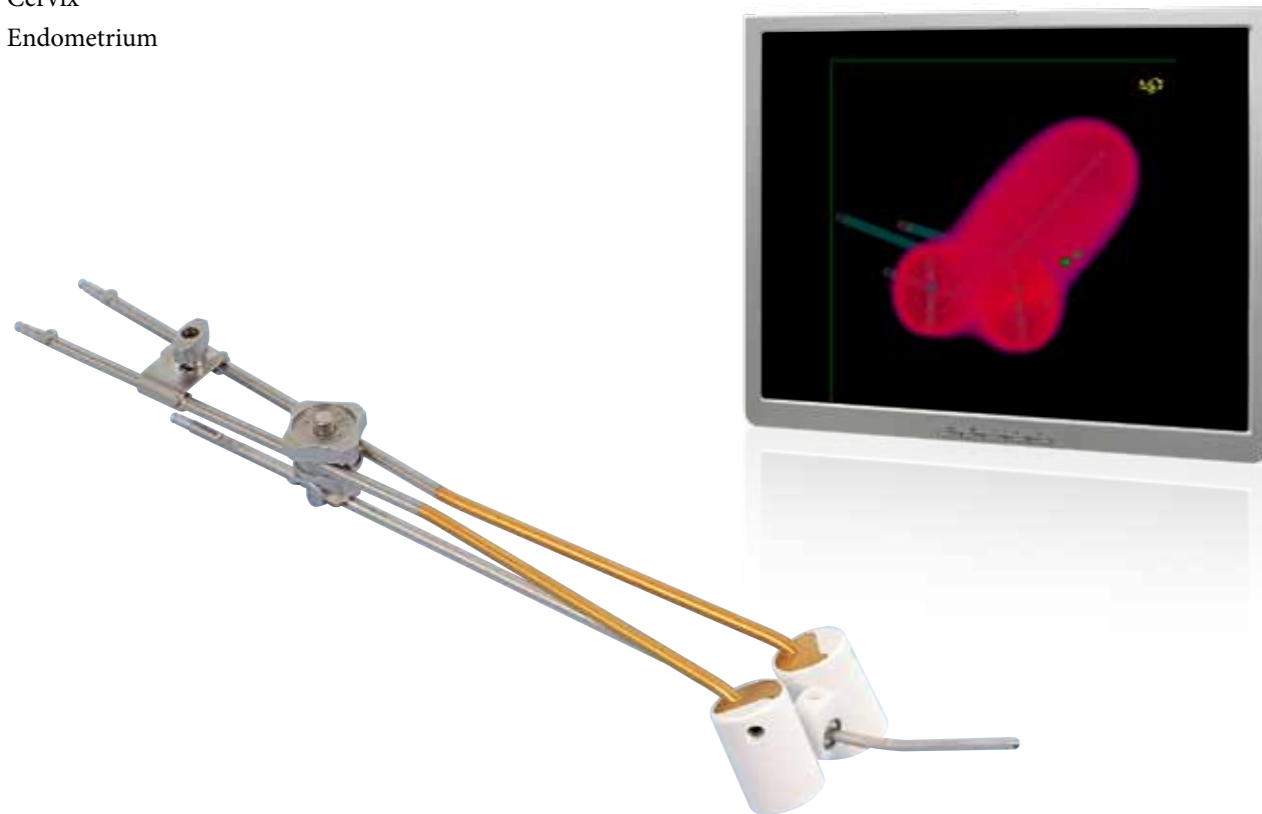
* For more options, refer to the last page of gynecology section.

Fletcher Williamson Applicator Set

- Embedded shielding reduces dose to critical organs

Applicable body sites:

- Cervix
- Endometrium



“The Fletcher Williamson applicator is a well crafted, precision instrument with bladder and rectal shielding. This instrument allows us to continue a quality technical approach to gynecological brachytherapy with high dose rate brachytherapy.”

J. Stitt, M.D.
University of Wisconsin, Madison, WI USA

This applicator is based on the dosimetry of the conventional Shielded Fletcher Style Applicator. A lightweight tungsten alloy shielding is incorporated in the ovoid Tubes to reduce the dose to the bladder and rectum. Ovoids are positioned at a 60° angle to the vaginal axis. The set includes mini ovoids for narrow vaginas and thin 3.2 mm Intrauterine Tubes. A specific Fletcher Williamson ‘Asia Pacific’ Applicator Set is available which is unshielded and has small geometry ovoids.

Order Information

Fletcher Williamson Appl. Set, part # 085.230

Part Number	Description
085.233	Ovoid Tube 1
085.234	Ovoid Tube 2
085.231	Shielded Ovoid Tube 1
085.232	Shielded Ovoid Tube 2
084.203	Ovoid Pair, Mini
085.235	Ovoid Cap Pair, 20 mm, Small
085.236	Ovoid Cap Pair, 25 mm, Medium
085.237	Ovoid Cap Pair, 30 mm, Large
084.028	Fixing Mechanism, Ovoid Tube
084.024	Intrauterine Tube 15°
084.025	Intrauterine Tube 30°
084.026	Intrauterine Tube 45°
084.030	Cervical Stopper, Small
084.027	Adjustable Fixing Mechanism
084.158	Sterilizing Caps, 3.2 mm (50 pcs)
006.182	Screwdriver
085.238	Sterilization Box

Fletcher Williamson Asia Pacific Set, part # 085.260

Part Number	Description
085.233	Ovoid Tube 1
085.234	Ovoid Tube 2
084.203	Ovoid Pair, Mini
084.041	Ovoid Pair, half, unshielded
084.042	Ovoid Pair, 20 mm, Small, Unshielded
084.028	Fixing Mechanism, Ovoid Tube
084.024	Intrauterine Tube 15°
084.025	Intrauterine Tube 30°
084.026	Intrauterine Tube 45°
084.030	Cervical Stopper, Small
084.027	Adjustable Fixing Mechanism
084.158	Sterilizing Caps, 3.2 mm
006.182	Screwdriver
085.258	Sterilization Box

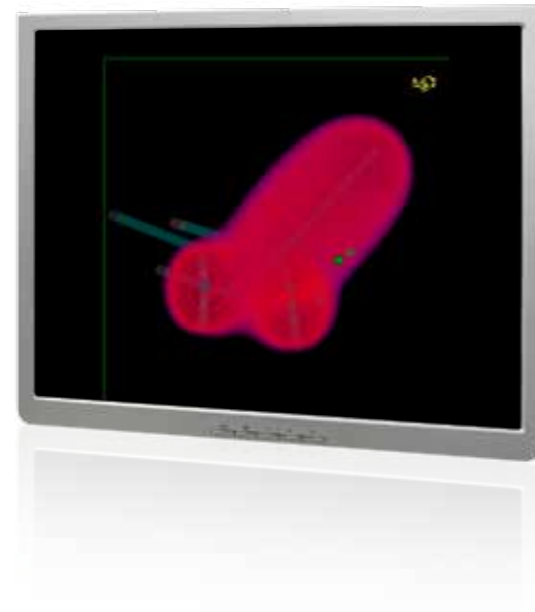
- The applicators can be sterilized using steam sterilization and EtO.
- User manual 090.604.

Standard CT/MR Applicator Set

- No distortions on CT or MR images
- Applicator with fixed geometry that ensures reproducible geometry
- Reproduces standard low dose rate isodose distributions

Applicable body sites:

- Cervix
- Endometrium



The Standard CT/MR Applicator Set is designed using a composite fiber tubing to eliminate distortion on CT or MR images. This enables conformal treatment planning with the use of transverse slices. To ensure applicator and treatment integrity, the Standard CT/MR Applicator has a fixed geometry.

Order Information

Standard CT/MR Applicator Set, part # 101.020

Quantity	Part Number	Description
1	101.021	Ovoid Tube 1
1	101.022	Ovoid Tube 2
1	101.023	Intrauterine Tube 40 mm
1	101.024	Intrauterine Tube 50 mm
1	101.025	Intrauterine Tube 60 mm
1	101.026	Ovoid Pair 20 mm
1	101.027	Ovoid Pair 25 mm
1	101.028	Ovoid Pair 30 mm
1	101.029	Rectal Retractor 30 mm
1	101.030	Rectal Retractor 40 mm
1	101.031	Ovoid Tube Fixing Mechanism
1	008.034	Screwdriver for Ovoid and Stopper
1	101.012	Sterilizing Caps, CT/MR
16	008.033	Ovoid Screws
1	090.613	User Manual
10	008.033	Ovoid Screws

Accessories

Part Number	Description
101.015	CT-MR Sterilization Box
110.302	Intrauterine Tube (4 mm), l=50 mm, 40°
189.566	Smit Sleeves CT/MR (l=40 mm, d=9 mm) (box of 10)

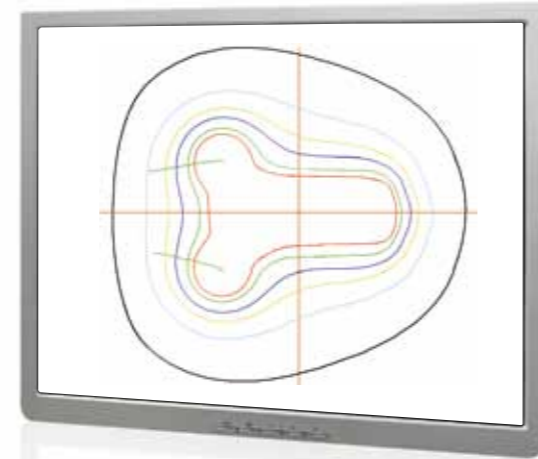
- Applicator can be sterilized using steam sterilization or EtO.
- User manual 090.613.

Henschke Titanium Applicator Set

- Lightweight shielding to reduce dose to critical organs
- Adjustable ovoid separation and shielding

Applicable body sites:

- Cervix
- Endometrium



The Henschke Titanium Applicator Set is based on the original low dose design by Dr. Henschke, with additional input from Memorial Sloane Kettering Hospital, New York. The Henschke Titanium Applicator Set reproduces standard low dose rate GYN isodose distributions.

Order Information

Henschke Titanium Applicator Set, part # 110.018

Part Number	Description
110.019	Dual Colpostat tube
110.435	Intrauterine Tube straight
110.436	Intrauterine Tube, 15°
110.437	Intrauterine Tube, 30°
110.438	Intrauterine Tube, 45°
065.085	Colpostat Cap Ø25 (pair)
065.086	Colpostat Cap Ø30 (pair)
110.283	Screwdriver for ovoids and stopper
110.430	Cervical stopper
008.033	Plastic Screw M5 PPSU (10 pcs)

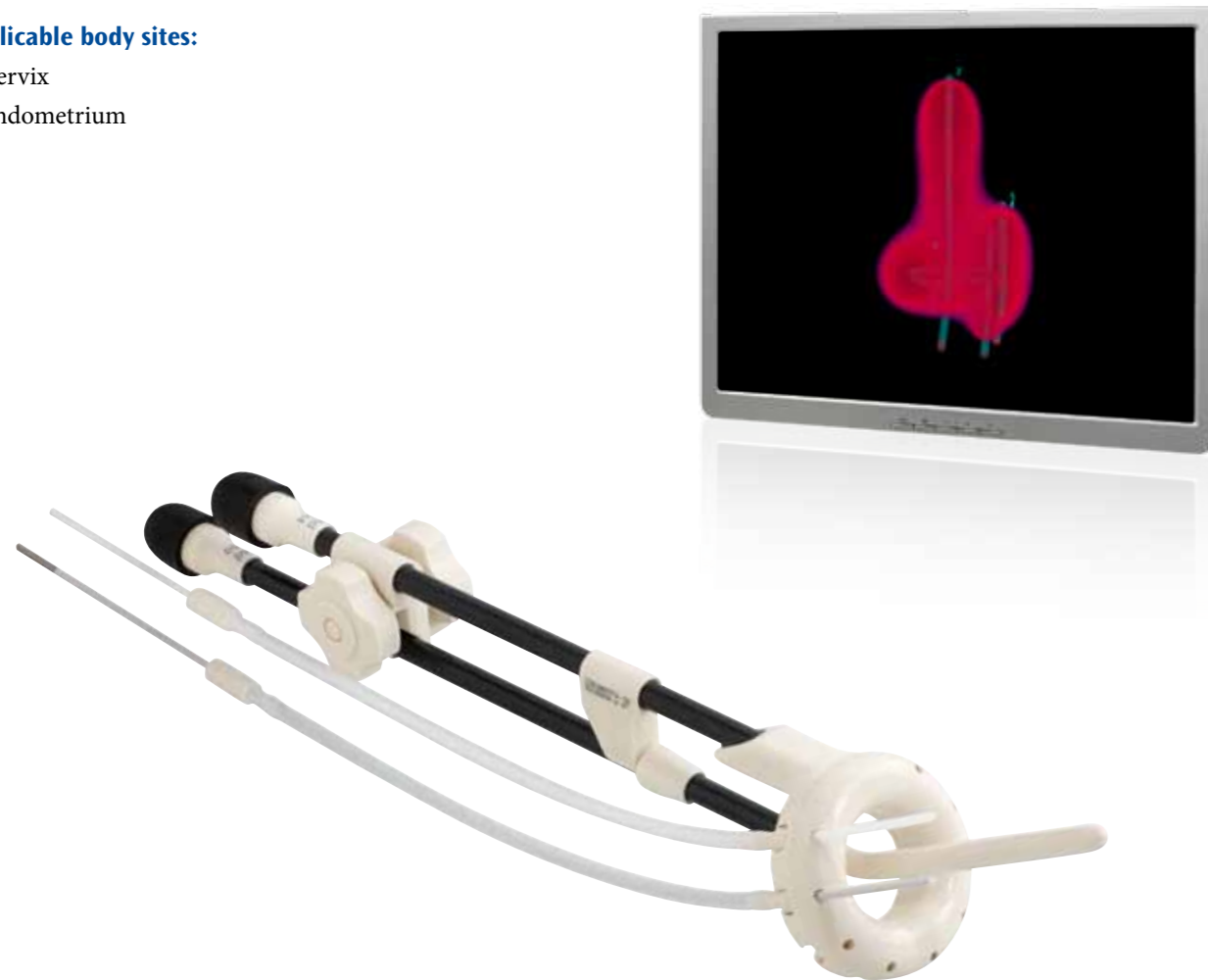
- CE marked, not available for sales in the US.
- The applicator can be sterilized using steam sterilization or EtO.
- Plastic caps to increase the diameter of the ovoids.
- The colpostat caps are available in different diameters to reduce the mucosal dose.
- The ovoid assembly is adjustable and assists in easy insertion.
- User manual 777.00144.

Interstitial Ring CT/MR Applicator Set

- Making complex treatments fast and easy
- Targeted dose optimization
- Designed to work with Oncentra treatment planning solutions

Applicable body sites:

- Cervix
- Endometrium



The Interstitial Ring CT/MR Applicator Set, based on the Ring CT/MR Applicator Set, allows for combined intracavitary and interstitial brachytherapy procedures. The ring serves as a template to insert ProGuide interstitial needles when the applicator is in place. The insertion depth of the needles can be easily controlled using the insertion tool. The needles are individually locked in place for treatment. The applicator is CT and MR-compatible, and enables conformal treatment planning with the use of transversal slices. The Interstitial Ring CT/MR Applicator Set offers a flexible solution to achieve optimally conformal cervical and parametrial dose coverage.

Order Information

Interstitial Ring CT/MR Applicator Sets (6 mm)
Set d=26 mm, 60° (max. 7 needles), part # 110.330 A01

Part Number	Description
110.350	Interstitial Ring Tube, diameter 26 mm, 60°
101.051	Intrauterine Tube, length 20 mm, 60° (6 mm)
101.052	Intrauterine Tube, length 40 mm, 60° (6 mm)
101.053	Intrauterine Tube, length 60 mm, 60° (6 mm)
101.057	Rectal Retractor, 60°
189.930	Fixation Nuts Set (spare), Set of 5
101.012	Sterilization Caps CT/MR, pack of 50, 50 pieces
110.268	Obturator, Set of 5
189.714	Insertion Tool
189.040	Cleaning brush Set
189.043	Cleaning brush Set

Set d=30 mm, 60° (max. 9 needles), part # 110.331 A01

Part Number	Description
110.351	Interstitial Ring Tube, diameter 30 mm, 60°
101.051	Intrauterine Tube, length 20 mm, 60° (6 mm)
101.052	Intrauterine Tube, length 40 mm, 60° (6 mm)
101.053	Intrauterine Tube, length 60 mm, 60° (6 mm)
101.057	Rectal Retractor, 60°
189.930	Fixation Nuts Set (spare), Set of 5
101.012	Sterilization Caps CT/MR, pack of 50
110.268	Obturator, Set of 5
189.714	Insertion Tool
189.040	Cleaning brush Set
189.043	Cleaning brush Set

Set d=34 mm, 60° (max. 9 needles), part # 110.332 A01

Part Number	Description
110.352	Interstitial Ring Tube, diameter 34 mm, 60°
101.051	Intrauterine Tube, length 20 mm, 60° (6 mm)
101.052	Intrauterine Tube, length 40 mm, 60° (6 mm)
101.053	Intrauterine Tube, length 60 mm, 60° (6 mm)
101.057	Rectal Retractor, 60°
189.930	Fixation Nuts Set (spare), Set of 5
101.012	Sterilization Caps CT/MR, pack of 50
110.268	Obturator, Set of 5
189.714	Insertion Tool
189.040	Cleaning brush Set
189.043	Cleaning brush Set

Interstitial Ring CT/MR Applicator Sets (4 mm)

The same Interstitial Ring CT/MR Applicator Sets, featuring ø 4 mm Intrauterine Tubes

Part Number	Description
110.330A02	Interstitial Ring Applicator Set d=26 mm, 60° (4 mm)
110.331A02	Interstitial Ring Applicator Set d=30 mm, 60° (4 mm)
110.332A02	Interstitial Ring Applicator Set d=34 mm, 60° (4 mm)

Accessories for all sets

Part Number	Description
110.230*	ProGuide Round Needle Set, 6F x 294 mm (Set of 5, single packed, delivered sterile)
110.273*	Guiding Tube for Ring Set for Interstitial Ring (Set of 5, single packed, delivered sterile)
110.350	Interstitial Ring Tube, diameter 26 mm, 60°
110.351	Interstitial Ring Tube, diameter 30 mm, 60°
110.352	Interstitial Ring Tube, diameter 34 mm, 60°
189.566	Smit Sleeves CT/MR for 6 mm Intrauterine Tube, l=40 mm, d=9 mm, open ended (box of 10)
189.676	Smit Sleeves CT/MR for 4 mm Intrauterine Tube, l=20 mm and longer, d=6 mm (box of 10) and following**
101.054	Perineal Bar
110.305/306/307	Intrauterine Tube, d=4 mm, 60°, L=20/40/60 mm
110.290	MR Line Marker Set

* Required for interstitial treatment.

** For more options, refer to the end of the Gynecology section.

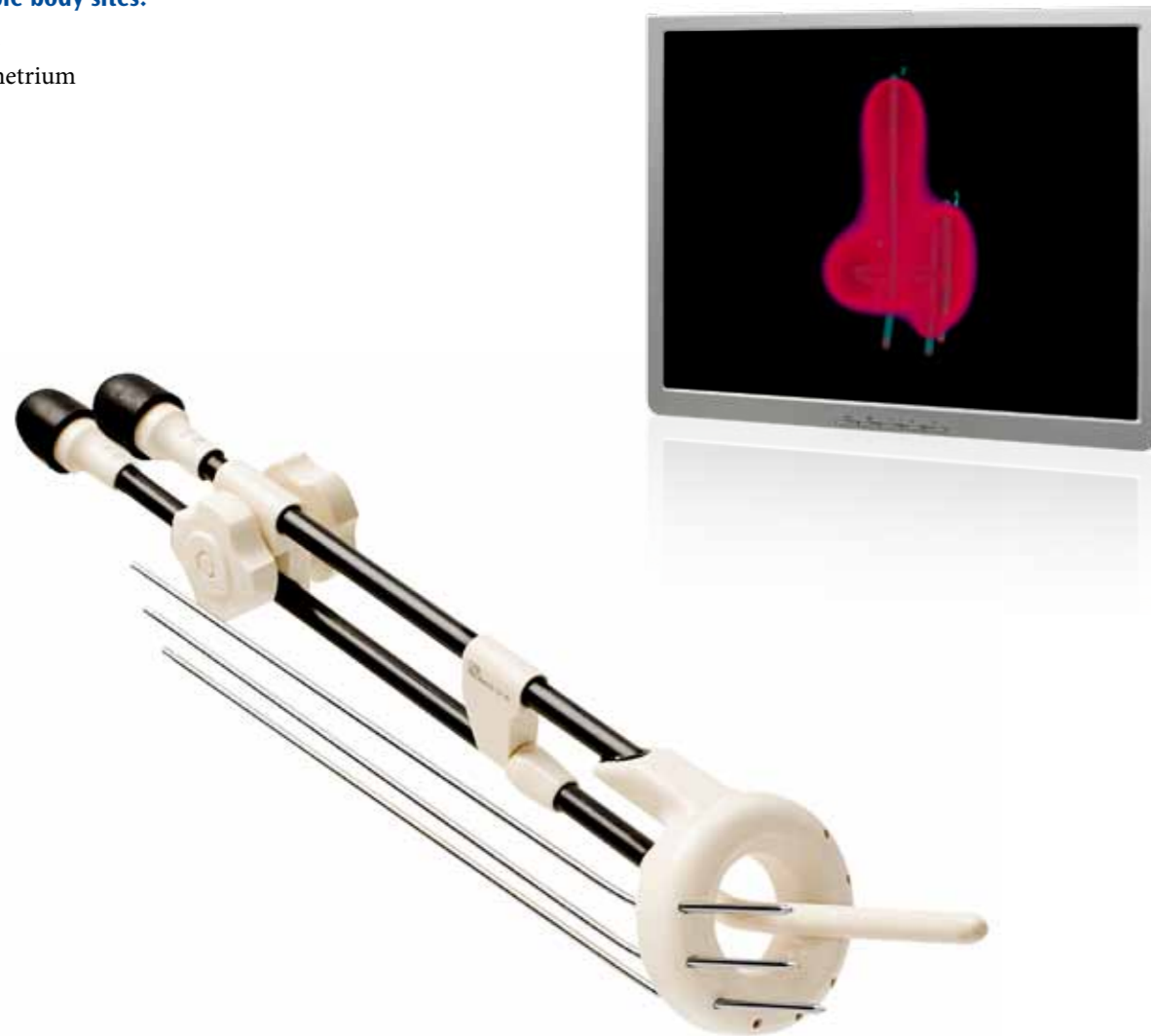
- Can also be used as regular intracavitary ring applicator.
- Use of needles with rounded tip can reduce the risk of perforation of critical structures, and is recommended for use with interstitial cervix applicators.
- The applicator can be sterilized using steam sterilization.
- User manual 777.00083.

Vienna Ring CT/MR Applicator Set

- Optimal dose sculpting for extended tumor stages
- Rigid needles and fixed applicator geometry

Applicable body sites:

- Cervix
- Endometrium



The Vienna Ring CT/MR Applicator is based on the CT/MR Ring Applicator, enhanced with the addition of nine guide holes in the ring Tube. These guide holes allow placement of interstitial titanium needles using the ring Tube as a needle template, while maintaining the treatment channel of the ring Tube. The addition of interstitial needles makes it possible to achieve asymmetric alteration of the dose distribution. The needles are inserted perpendicular to the ring and in parallel to the tandem. The applicator's plastic and composite fiber materials minimize distortion on CT or MR imaging. The Round Point needle is designed to minimize tissue damage and for ease in implantation. This applicator, developed by renowned clinical experts, offers the solution for treatment of extended tumor stages with an optimised dose without the limitation caused by vicinity of organs at risk.

Order Information

Vienna Ring CT/MR Appl. Set 26 mm, 60°, part # 189.699

Part Number	Description
189.713	Vienna Ring CT/MR Tube, 60° (for 7 needles)
101.051	Intrauterine Tube, l=20 mm, 60°
101.052	Intrauterine Tube, l=40 mm, 60°
101.053	Intrauterine Tube, l=60 mm, 60°
101.057	Rectal Retractor, 60°
189.930	Set of 5 Fixing Nuts (spare)
101.012	Sterilization Caps, CT/MR, 50 pieces
110.720	Needle Fixation Tool, d=26 mm
189.040	Cleaning brush Set
189.043	Cleaning brush Set

Vienna Ring CT/MR Appl. Set 30 mm, 60°, part # 189.792

Part Number	Description
189.799	Vienna Ring CT/MR Tube, 60° (for 9 needles)
101.051	Intrauterine Tube, l=20 mm, 60°
101.052	Intrauterine Tube, l=40 mm, 60°
101.053	Intrauterine Tube, l=60 mm, 60°
101.057	Rectal Retractor, 60°
189.930	Set of 5 Fixing Nuts (spare)
101.012	Sterilization Caps, CT/MR
110.721	Needle Fixation Tool, d=30 mm
189.040	Cleaning brush Set
189.043	Cleaning brush Set

Vienna Ring CT/MR Appl. Set 34 mm, 60°, part # 189.569

Part Number	Description
189.567	Vienna Ring CT/MR Tube, 60° (for 9 needles)
101.051	Intrauterine Tube, l=20 mm, 60°
101.052	Intrauterine Tube, l=40 mm, 60°
101.053	Intrauterine Tube, l=60 mm, 60°
101.057	Rectal Retractor, 60°
189.930	Set of 5 Fixing Nuts (spare)
101.012	Sterilization Caps, CT/MR
189.995	Needle Fixation Tool, d=34 mm
189.040	Cleaning brush Set
189.043	Cleaning brush Set

Accessories

Part Number	Description
110.720	Needle Fixation Tool, d=26 mm
110.721	Needle Fixation Tool, d=30 mm
189.995	Needle Fixation Tool, d=34 mm
110.025	Round Point Ti. Needle Set, 1.9 mm x 240 mm, 60°, 30 mm (Set of 5 needles)
110.027	Round Point Ti. Needle Set, 1.9 mm x 240 mm, 60°, 40 mm (Set of 5 needles)
110.029	Round Point Ti. Needle Set, 1.9 mm x 240 mm, 60°, 50 mm (Set of 5 needles)
083.252	Obturator for needle (l=100 mm)*
089.636	Handle for Obturator
189.566*	Smit Sleeves CT/MR (box of 10, l=40 mm, d=9 mm)
101.054	Perineal Bar
110.305/306/307	Intrauterine Tube, d=4 mm, 60°, L=20/40/60 mm

* For more options, refer to last page of the gynecology section.

- Can also be used as a standard intracavitary ring applicator.
- Use of needles with rounded tip can reduce the risk of perforation of critical structures, and is recommended for use with interstitial cervix applicators.
- Non-clinical testing has demonstrated that the titanium needles and the needle fixation tool are MR Conditional. These products can be scanned safely under the following conditions: Static magnetic field up to 0.23 Tesla.
- The applicator can be sterilized using steam sterilization.
- User manual 090.720.

Ring CT/MR Applicator Set

- Fixed geometry

Applicable body sites:

- Cervix
- Endometrium



MR safe



“We use the ring applicator to match the dosimetry of the Stockholm box.”

T.H. Knocke, M.D.
Universitätsklinik für Strahlentherapie, Wien, Austria

This non-metallic applicator has been designed using composite fiber tubing to eliminate distortion on CT or MR images. This enables conformal treatment planning with the use of transverse slices. This applicator has been designed with a fixed geometry to ensure applicator and treatment integrity.

Order Information

Ring CT/MR Applicator Set, part # 101.035

Part Number	Description
101.060	Ring Applicator Set, 30°, CT/MR
101.061	Ring Applicator Set, 45°, CT/MR
101.062	Ring Applicator Set, 60°, CT/MR
101.038	Ring Tube, d=34 mm, 30°
101.044	Ring Tube, d=34 mm, 45°
101.050	Ring Tube, d=34 mm, 60°
101.054	Perineal Bar

Ring CT/MR Applicator Set 30°, part # 101.060

Part Number	Description
101.036	Ring Tube, d=26 mm, 30°
101.037	Ring Tube, d=30 mm, 30°
101.039	Intrauterine Tube, l=20 mm, 30°
101.040	Intrauterine Tube, l=40 mm, 30°
101.041	Intrauterine Tube, l=60 mm, 30°
101.056	Rectal Retractor, 30°
101.012	Sterilizing Caps CT/MR (pack of 50)

Ring CT/MR Applicator Set 45°, part # 101.061

Part Number	Description
101.042	Ring Tube, d=26 mm, 45°
101.043	Ring Tube, d=30 mm, 45°
101.045	Intrauterine Tube, l=20 mm, 45°
101.046	Intrauterine Tube, l=40 mm, 45°
101.047	Intrauterine Tube, l=60 mm, 45°
101.055	Rectal Retractor, 45°
101.012	Sterilizing Caps CT/MR (pack of 50)

Ring CT/MR Applicator Set 60°, part # 101.062

Part Number	Description
101.048	Ring Tube, d=26 mm, 60°
101.049	Ring Tube, d=30 mm, 60°
101.051	Intrauterine Tube, l=20 mm, 60°
101.052	Intrauterine Tube, l=40 mm, 60°
101.053	Intrauterine Tube, l=60 mm, 60°
101.057	Rectal Retractor, 60°
101.012	Sterilizing Caps CT/MR (pack of 50)

Accessories

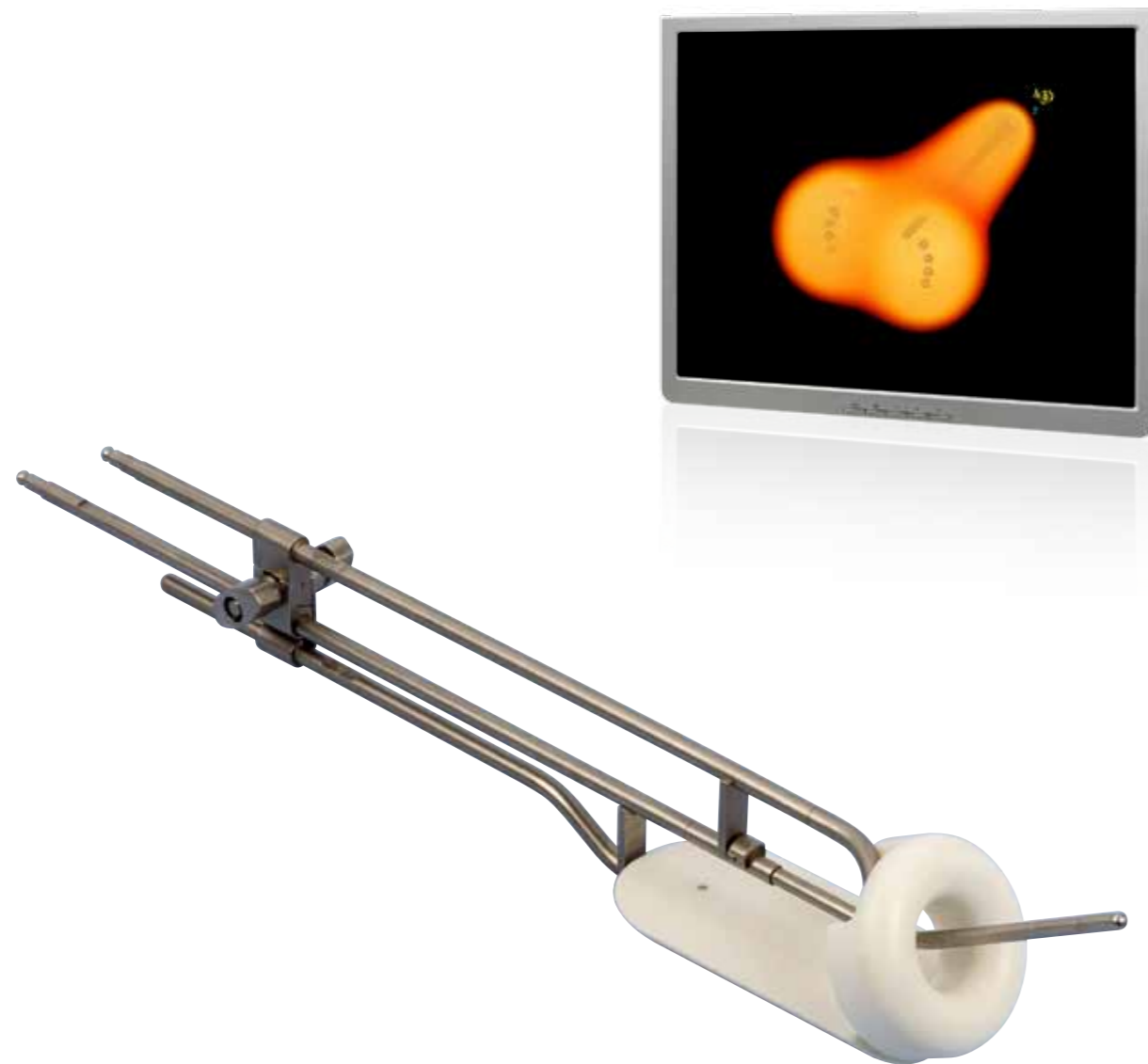
Part Number	Description
189.566	Smit Sleeve CT/MR (length=40 mm, diameter=9 mm)
101.054	Perineal Bar (for part # 101.060/.061/.062)
101.038	Ring Tube, d=34 mm, 30° (for part # 101.060)
101.044	Ring Tube, d=34 mm, 45° (for part # 101.061)
101.050	Ring Tube, d=34 mm, 60° (for part # 101.062)
110.303/.304 /.305 / .306 / .307	Intrauterine Tube, d=4 mm, l=40 30°/45°/60°
101.015	Sterilization Box
110.290	MR Line Marker Set

- This applicator can be sterilized using steam sterilization.
- User manual 090.617.

Ring Applicator Set

Applicable body sites:

- Cervix
- Endometrium



The Ring Applicator simulates the Stockholm Box technique using a ring and a rigid intrauterine tube. The ability of the afterloader to alter source position and dwell times enables the applicator to be used to shape similar dosimetry to the Fletcher or Manchester techniques. A rectal retractor can be used to push the rectal/vaginal wall to a fixed distance from the source.

Order Information

Complete Ring Applicator Set, part # 084.050

Part Number	Description
085.095	Ring Applicator Set, 30°
085.096	Ring Applicator Set, 45°
085.097	Ring Applicator Set, 60°
084.072	Perineal bar
084.056	Ring Tube, d=34 mm, 30°
084.055	Ring Tube, d=34 mm, 45°
084.054	Ring Tube, d=34 mm, 60°
084.051	Ring Cap, d=34 mm

Ring Applicator Set 30°, part # 085.095

Part Number	Description
084.062	Ring Tube, d=26 mm, 30°
084.059	Ring Tube, d=30 mm, 30°
084.065	Intrauterine Tube, length 20 mm, 30°
084.064	Intrauterine Tube, length 40 mm, 30°
084.063	Intrauterine Tube, length 60 mm, 30°
084.316	Rectal Retractor, 30°
084.053	Ring Cap, d=26 mm
084.052	Ring Cap, d=30 mm
084.158	Sterilizing Caps, 3.2 mm (50 pcs)

Ring Applicator Set 45°, part # 085.096

Part Number	Description
084.061	Ring Tube, d=26 mm, 45°
084.058	Ring Tube, d=30 mm, 45°
084.068	Intrauterine Tube, length 20 mm, 45°
084.067	Intrauterine Tube, length 40 mm, 45°
084.066	Intrauterine Tube, length 60 mm, 45°
084.335	Rectal Retractor, 45°
084.053	Ring Cap, d=26 mm
084.052	Ring Cap, d=30 mm
084.158	Sterilizing Caps, 3.2 mm (50 pcs)

Ring Applicator Set 60°, part # 085.097

Part Number	Description
084.060	Ring Tube, d=26 mm, 60°
084.057	Ring Tube, d=30 mm, 60°
084.070	Intrauterine Tube, length 20 mm, 60°
084.069	Intrauterine Tube, length 40 mm, 60°
084.063	Intrauterine Tube, length 60 mm, 60°
084.316	Rectal Retractor, 60°
084.053	Ring Cap, d=26 mm
084.052	Ring Cap, d=30 mm
084.158	Sterilizing Caps, 3.2 mm (50 pcs)

- Applicator can be sterilized using steam sterilization and EtO.
- User manual 090.610.

Accessories

Part Number	Description
084.056	Ring Tube, d=34 mm, 30° (for part # 085.095)
084.055	Ring Tube, d=34 mm, 45° (for part # 085.096)
084.054	Ring Tube, d=34 mm, 60° (for part # 085.097)
084.072	Perineal Bar (already included in part # 084.050)
189.676 and following*	Smit Sleeves CT/MR for 4 mm Intrauterine Tube, length 20 mm and longer, d=6 mm (box of 10)

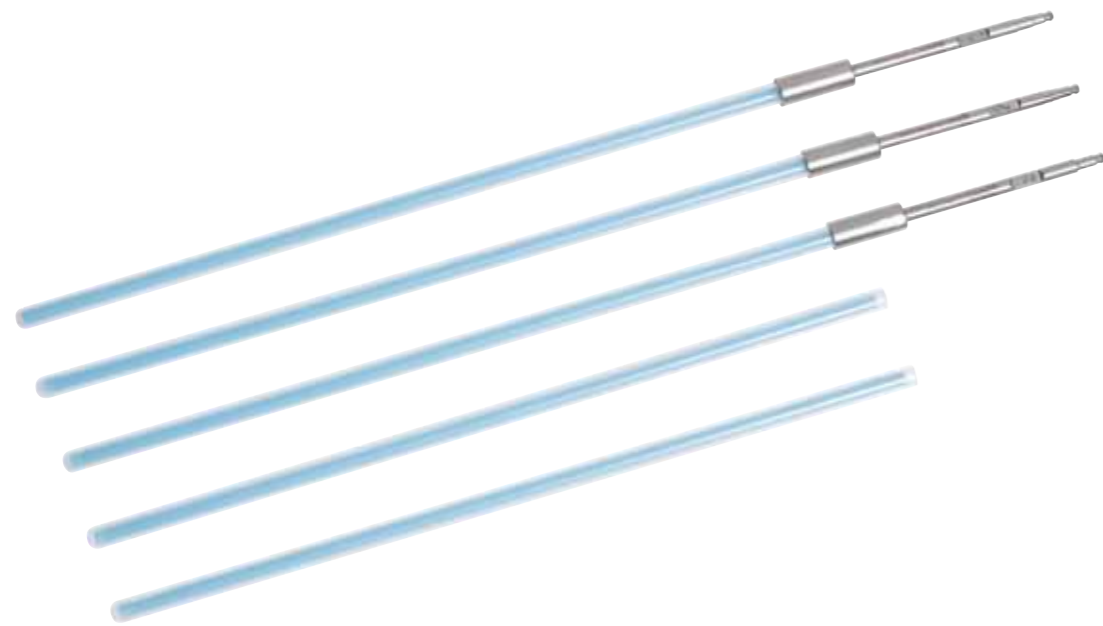
* For more options, refer to last page of the gynecology section.

Vaginal Mold Applicator Set

- Tailored irradiation
- Precise dose distribution

Applicable body sites:

- Vagina
- Cervix



The Vaginal Mold Applicator Set was developed in close cooperation with Center Oscar Lambret in Lille, France. It enables the user to apply the French “moulage”, or Institut Gustave Roussy, technique for afterloading. The aim of this method is personalized irradiation with precise dose distribution and good patient tolerance. The set consists of three, mechanically coded, stainless steel channel assemblies which can be easily connected to the flexible Vaginal Mold Tubes. These are embedded in the customized mold.

Order Information

Vaginal Mold Applicator Set, part # 189.018

Part Number	Description
189.020	Vaginal Mold Channel 1 Assembly
189.021	Vaginal Mold Channel 2 Assembly
189.022	Vaginal Mold Channel 3 Assembly
189.019	Vaginal Mold Tubes Set (30 pieces)
084.158	Sterilizing Caps (50 pieces)

- The Vaginal Mold Channel assemblies are reusable, and can be sterilized using steam sterilization and EtO.
- The Vaginal Mold Tubes are for single use only, and can be sterilized using EtO.
- User manual 090.708.

Vaginal CT/MR Multi Channel Applicator Set

Precise Dose Delivery Solution

- Reach where it matters most
- Unique treatment precision
- Practical design

Applicable body sites:

- Vagina
- Cervix
- Endometrium



MR safe



The new Vaginal CT/MR Multi Channel (VCMC) Applicator is the first applicator for vaginal brachytherapy in the treatment of endometrial and other gynecologic cancers that features curved treatment channels in the applicator's tip. By bringing dosimetry measurably closer to the vaginal vault, conformity and treatment precision can be dramatically improved. The treatment channels can also be loaded separately, and add to the ability to treat more complex or advanced tumors.

For treatment, a catheter is inserted in the required treatment channels and connected to the afterloader. These channels are located immediately underneath the surface of the applicator, to provide optimal control over the dosimetry at the target and around organs at risk.

The VCMC applicator can be seamlessly integrated with Oncentra Brachy's Applicator Modeling module and Library Plans. The combination of the VCMC applicator with Oncentra Brachy offers an accurate and reproducible 3D planning solution for vaginal brachytherapy.

Order Information

Vaginal CT/MR Multi Channel Appl. Set, part # 110.750

Part Number	Description
101.002	Intravaginal Tube
110.752	Set of cylinder components, Ø 25 mm (features 6 surface channels)
110.756	Set of cylinder components, Ø 30 mm (features 8 surface channels)
110.761	Set of cylinder components, Ø 35 mm (features 8 surface channels)
101.012	Sterilizing Caps CT/MR (pack of 50)

Accessories

Part Number	Description
110.800*	Catheter Set with Collar 6Fx293 mm (delivered sterile and for single use only)
110.766	Set of cylinder components, Ø 40 mm (features 10 surface channels)
101.003	CT/MR Intrauterine Tube 15°, L=40 mm, Ø 6 mm
101.004	CT/MR Intrauterine Tube 30°, L=60 mm, Ø 6 mm
101.005	CT/MR Intrauterine Tube 45°, L=80 mm, Ø 6 mm
110.787**	CT expansion Set, featuring thin titanium Intrauterine Tubes L=40, 60 and 80 mm
110.773	Perineal Bar Set
110.771	Set of fixations screws (5 pcs)
110.778	Applicator Clamp Adapter Set
101.015	Sterilization Box

* Required for use.

** When using Titanium Intrauterine Tubes the applicator is MR unsafe.

- The center of the surface channels is located 5 mm underneath the cylinder surface.
- The applicator can be sterilized using steam sterilization.
- User manual for applicator 777.00171.
- User manual for catheters 777.00172.

Vaginal CT/MR Applicator Set

- Reproducible dosimetry
- Easily adaptable to patient anatomy



Applicable body sites:

- Vagina
- Cervix
- Endometrium
- Rectum



The Vaginal CT/MR Applicator Set is designed for treatment of the vaginal cuff. This easy to use applicator is available in different cylinder diameters, to reduce the surface dose. By varying the number of segments of the cylinder, the length of the cylinder can be adapted to clinical needs. The non-metallic materials of the applicator set support its use in combination with CT and MR imaging modalities.

Order Information

Complete Set, part # 101.001

Part Number	Description
101.002	Vaginal Tube
101.003	Applicator Tube 15°, 40 mm
101.004	Applicator Tube 30°, 60 mm
101.005	Applicator Tube 45°, 80 mm
101.007	Set of 4 cylinders, 20 mm
101.008	Set of 4 cylinders, 25 mm
101.009	Set of 4 cylinders, 30 mm
101.010	Set of 4 cylinders, 35 mm
101.006	Cylinder fixation
101.013	Perineal Bar
101.012	Sterilizing Caps CT/MR (pack of 50)

Accessories

Part Number	Description
101.011	Set of 4 cylinders, 40 mm
189.566	Smit Sleeve CT/MR (length=40 mm, diameter=9 mm)
101.015	Sterilization Box
101.149	Knob PPSU*

* Minimum order quantity is 5 pieces.

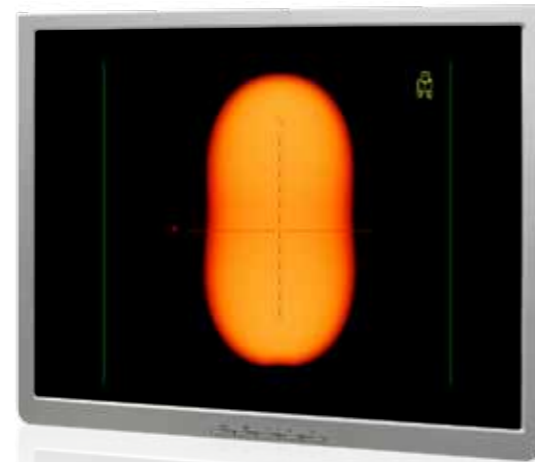
- This applicator can be sterilized using steam sterilization.
- User manual 090.612.

Ti Vaginal Cylinder Applicator Set

- Embedded markers
- Strong and lightweight

Applicable body sites:

- Vagina
- Cervix
- Endometrium
- Rectum



The Titanium (Ti) Vaginal Cylinder Applicator is an easy solution for intracavitary vaginal treatments. When used with an Intrauterine Tube, the Vaginal Applicator also offers a simple solution for treatment of the cervix, rectum or endometrium. The embedded titanium markers in the cylinder segments support visualization of the inserted applicator while minimizing contamination risk. The set is available in a range of different diameters and curvatures of the Intrauterine Tube, to provide individually optimized treatment options and dose distribution.

Order Information

Ti Vaginal Cylinder Applicator Set, part # 137.400

Part Number	Description
137.194	Cylinder Set, d=20 mm
137.195	Cylinder Set, d=25 mm
137.196	Cylinder Set, d=30 mm
137.416	Intra-vaginal applicator Tube (Ti)
137.402	Intra-vaginal/intra-uterine Tube, 40 mm (Ti)
137.403	Intra-vaginal/intra-uterine Tube, 60 mm (Ti)
137.404	Intra-vaginal/intra-uterine Tube, 80 mm (Ti)
137.401	Perineal bar 1
137.415	Spring lock Tube (Ti)
137.570	Closing caps (25 pcs)

Accessories

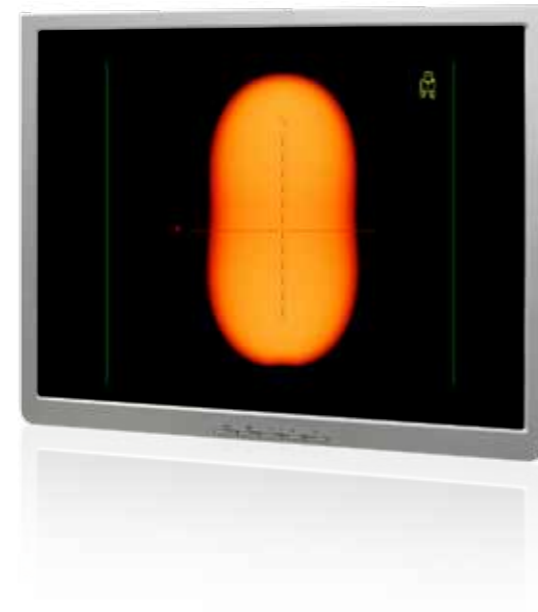
Part Number	Description
137.197	Cylinder Set, d=15 mm
137.198	Cylinder Set, d=35 mm
137.199	Cylinder Set, d=40 mm
137.573	Sterilization tray
189.677/679/682	Smit Sleeve

- The applicator can be sterilized using steam sterilization.
- User manual 777.00118.

Shielded Cylindrical Applicator Set

Applicable body sites:

- Vagina
- Rectum



Order Information

Shielded Cylindrical Applicator Set, part # 084.320

Quantity	Part Number	Description
1	084.321	Central Tube
1	084.329	Tungsten Shielding, 180°
2	084.328	Tungsten Shielding, 90°
1	084.322	Cylinder, d=25 mm
1	084.323	Cylinder, d=30 mm
1	084.324	Cylinder, d=35 mm
1	084.325	Cylinder, d=40 mm
1	084.327	Fixing Nut
1	084.158	Sterilizing Caps, 3.2 mm (50 pcs)
1	084.330	Sterilization Box

Accessories

Part Number	Description
084.348	Plastic filler, 90° geometry
084.349	Plastic filler, 180° geometry

The Shielded Cylindrical Applicator is designed for intracavitary treatments in which partial shielding is required to reduce the dose to critical organs. The shielding positions can be defined by the user through the use of tungsten alloy segments with different shielding angles. Markers indicate the position of the shielding.

- User manual 090.609.

Miami Vaginal Applicator Set

Applicable body sites:

- Vagina
- Cervix
- Endometrium
- Rectum



The Miami Vaginal Applicator Set was developed in cooperation with the University of Miami. The applicator contains 6 lateral tubes, which are equally spaced around the surface of the cylinder for optimized treatment.

A central tube and different intrauterine tubes expand the possible treatment options. Three different curvatures of intrauterine tubes are included and adjust to the uterine length. The vaginal cylinder is 30 mm in diameter with cylinder sleeves of 35 and 40 mm. This enables versatility in the treatment of vaginal, cervical, uterine and rectal carcinomas.

Order Information

Miami Applicator Set, part # 085.210

Part Number	Description
085.211	Central Tube
084.455	Intrauterine tube, straight
084.456	Intrauterine tube, 15°
084.457	Intrauterine tube, 30°
085.212	Cylinder, d=30 mm, with marker
085.213	Cylinder Sleeve, d=35 mm
085.214	Cylinder Sleeve, d=40 mm
085.218	Cone insert
006.182	Screwdriver
598.027	Allen Key Screwdriver 3 mm
083.147	Sterilizing Caps, 1.9 mm (50 pcs)
084.158	Sterilizing Caps, 3.2 mm (50 pcs)
189.676 and following*	Smit Sleeves CT/MR for 4mm Intrauterine Tube, length 20 mm and longer, d=6 mm (box of 10)

* For more options, refer to the end of the Gynecology section.

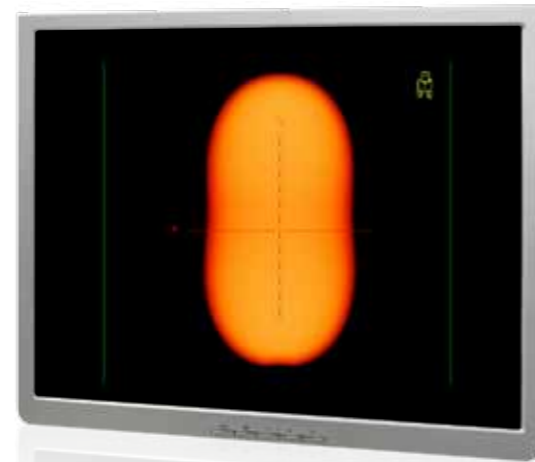
- Applicator can be sterilized using EtO.
- User manual 090.601.

Vaginal Applicator Set

- Reproducible dosimetry
- Easily adaptable to patient geometry

Applicable body sites:

- Vagina
- Cervix
- Endometrium
- Rectum



Order Information

Vaginal Applicator Set, part # 084.350

Part Number	Description
084.002	Vaginal Tube
084.003	Intrauterine Tube, length 40 mm, 15°
084.004	Intrauterine Tube, length 60 mm, 30°
084.005	Intrauterine Tube, length 80 mm, 45°
084.010	Cylinder Locking Pipe
084.351	4 Cylinder parts, d=0 mm, with marker
084.352	4 Cylinder parts, d=25 mm, with marker
084.353	4 Cylinder parts, d=30 mm, with marker
084.354	4 Cylinder parts, d=35 mm, with marker
084.158	Sterilizing Caps, 3.2 mm (50 pcs)
084.089	Sterilization Box, for 084.350

Accessories

Part Number	Description
084.008	Perineal Bar
084.009	Cervical Stopper
084.355	4 Cylinder parts, d=40 mm, with marker
084.875	4 Cylinder parts, d=15 mm, with marker
101.149	Knob PSU
189.676 and following*	Smit Sleeves CT/MR for 4 mm Intrauterine Tube, length 20 mm and longer, d=6 mm (box of 10)

* For more options, refer to the end of the Gynecology section.

The Vaginal Applicator Set for intracavitary treatment is very user-friendly. The set is available with three different lengths and curvatures of the intrauterine tube to provide additional treatment options. The cylinders are available in different diameters to optimize the dose distribution and reduce the mucosal dose.

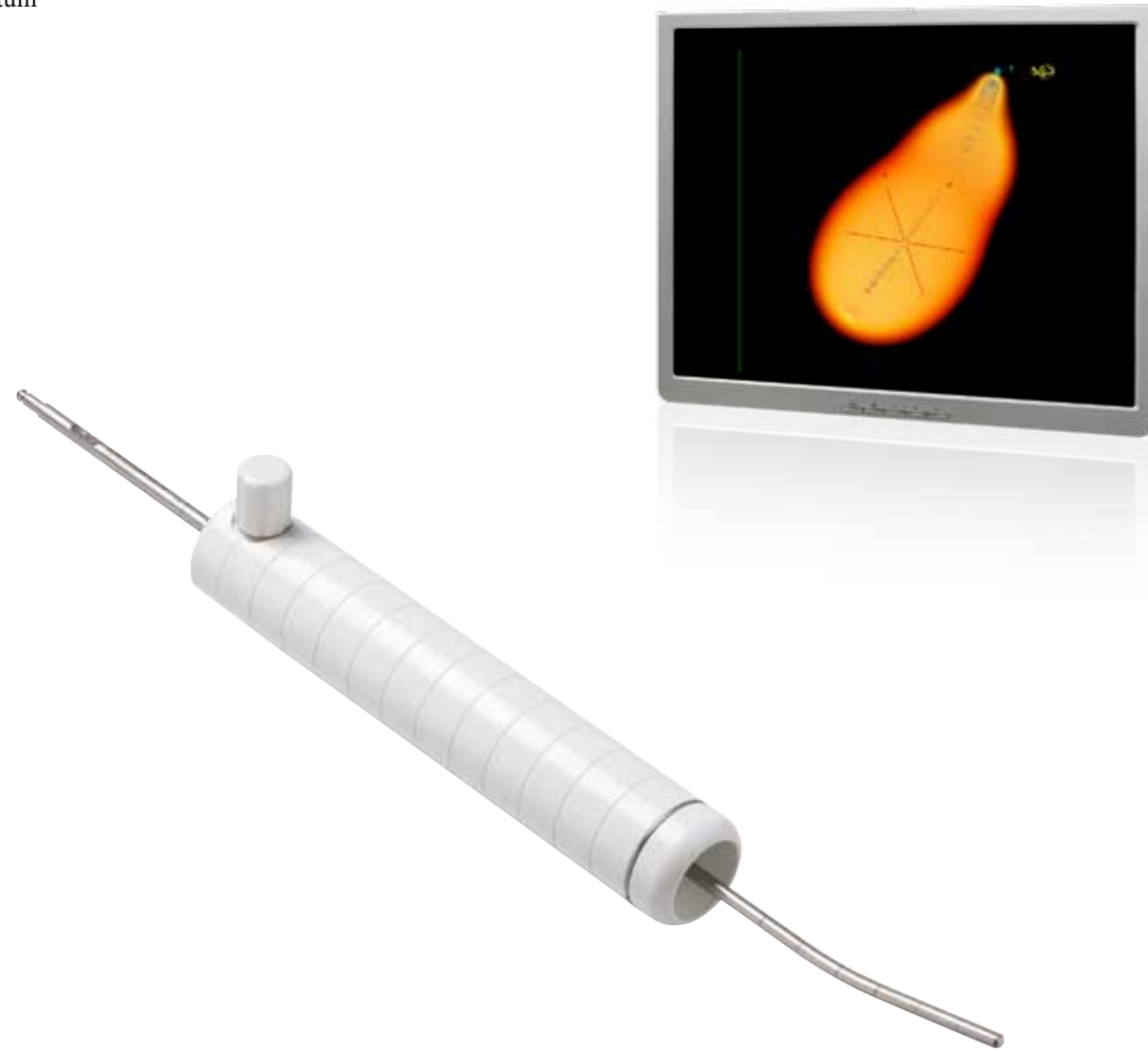
The Vaginal Applicator can be used to treat vaginal cuff, cervix, rectum or endometrium when used with an intrauterine tube.

- Applicator can be sterilized using steam sterilization and EtO.
- User manual 090.606

Adjustable Cervix Applicator Set

Other applicable body sites:

- Cervix
- Endometrium
- Vagina
- Rectum



The Adjustable Cervix Applicator for intracavitary treatment is very user-friendly. The cylinders are available in different diameters to optimize the dose distribution and reduce the mucosal dose. The intrauterine tube is available in three curvatures with different lengths. Conjointly, this gives a versatile applicator for cervical, uterine, vaginal and rectal cancer treatment.

Order Information

Adjustable Cervix Applicator Set, part # 084.450

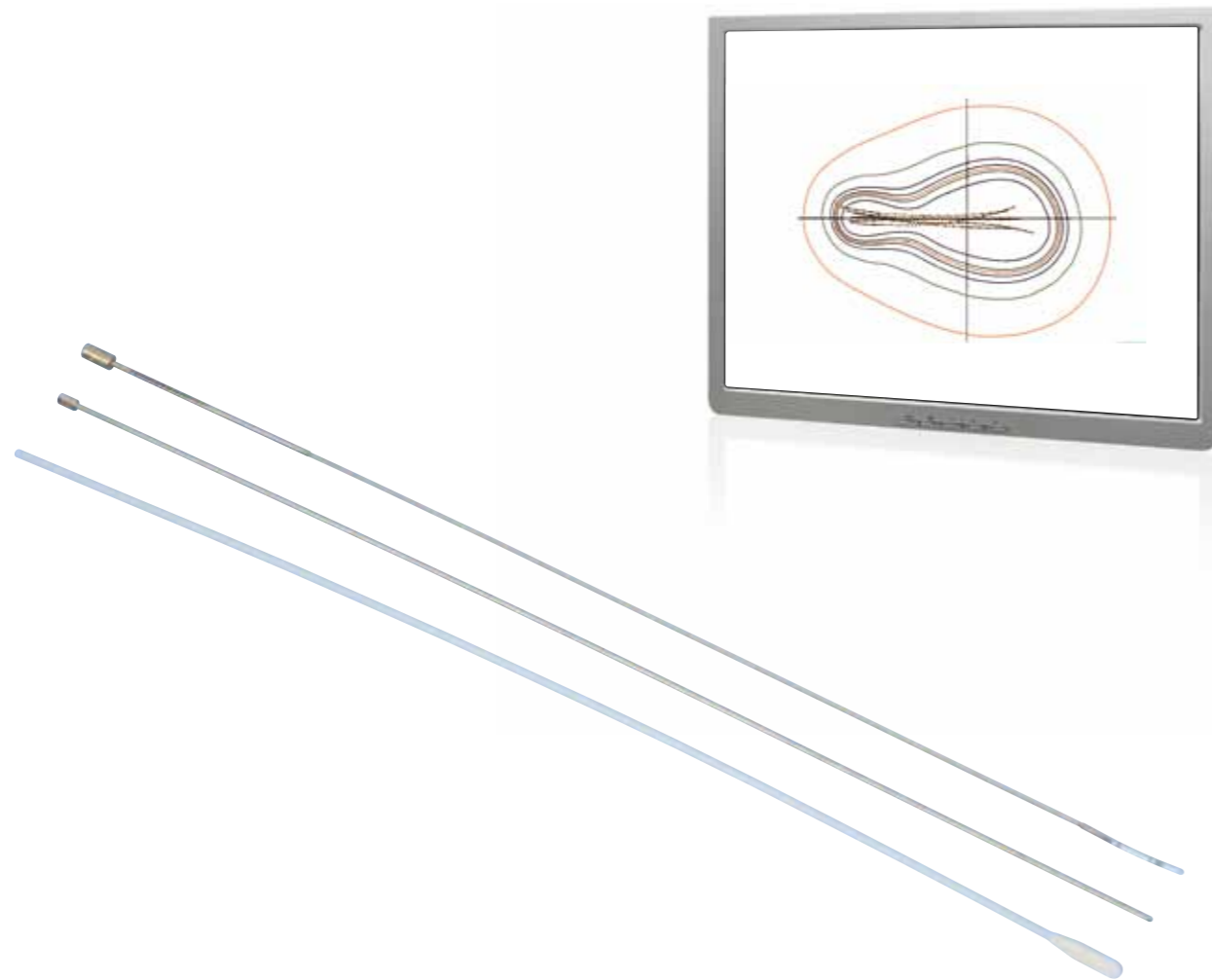
Part Number	Description
084.455	Intrauterine Tube, straight
084.456	Intrauterine Tube, angle 15°
084.457	Intrauterine Tube, angle 30°
084.451	Cylinder, d = 20 mm, with marker
084.452	Cylinder, d = 25 mm, with marker
084.453	Cylinder, d = 30 mm, with marker
084.454	Cylinder, d = 35 mm, with marker
084.158	Sterilising Caps, 3.2 mm (pack of 50)

- User manual 090.611.

Norman Simon Applicator Set

Applicable body sites:

- Endometrium



The Norman Simon Applicator Set is intended to duplicate the low dose rate Heyman Packing technique for treatment of endometrial cancer.

Order Information

Basic Norman Simon Applicator Set, part # 089.079

Quantity	Part Number	Description
5	089.191	Norman Simon Applicator 1, d=6 mm
5	089.192	Norman Simon Applicator 2, d=6 mm
5	089.193	Norman Simon Applicator 3, d=6 mm
5	089.194	Norman Simon Applicator 4, d=6 mm
5	089.195	Norman Simon Applicator 5, d=6 mm
5	089.196	Norman Simon Applicator 6, d=6 mm
5	089.197	Norman Simon Applicator 7, d=6 mm
5	089.198	Norman Simon Applicator 8, d=6 mm
5	089.199	Norman Simon Applicator 9, d=6 mm
1	089.096	X-Ray Catheter Set(1-9), Norman Simon Applicators

Accessories

Part Number	Description
083.272	Insertion Obturator for 1.9 mm Needle x294 mm

- Regulatory approval for this applicator is pending.
- For use with microSelectron afterloader only.
- The applicators can be sterilized using EtO sterilization. The included obturators can also be sterilized using steam sterilization.
- X-Ray catheter set #089.097 facilitate use of 10-18 applicators.
- User manual 090.616.

Rotte Endometrial Applicator Set

- Excellent reproducibility of dose distribution
- Straightforward workflow

Applicable body sites:

- Endometrium

Basic Rotte Applicator Set, 32 mm, part # 084.230

Part Number	Description
084.231	Applicator Tube 1, Right Uterus
084.232	Applicator Tube 2, Left Uterus
084.158	Sterilising Caps, 3.2 mm (50 pcs)

Complete Set, part # 084.434

Part Number	Description
084.435	Basic Rotte Applicator Set, 20 mm
084.230	Basic Rotte Applicator Set, 32 mm
084.436	Basic Rotte Applicator Set, 40 mm
084.437	Basic Rotte Applicator Set, 50 mm
084.158	Sterilising Caps, 3.2 mm (50pcs)



The Rotte Endometrial Applicator (or Rotte “Y” applicator) has been developed with Professor K. Rotte of the Universitäts-Frauenklinik, Würzburg, Germany, and is specifically designed for high dose rate treatment of the endometrium. The applicator is easy to insert, using two opposed Intrauterine Tubes. The Intrauterine Tubes can be locked in position with a single action. Once locked, the applicator has a fixed geometry which provides an excellent reproducibility of the dose distribution. The Rotte Endometrial Applicator offers a treatment alternative for the ‘Heyman’ packing technique.

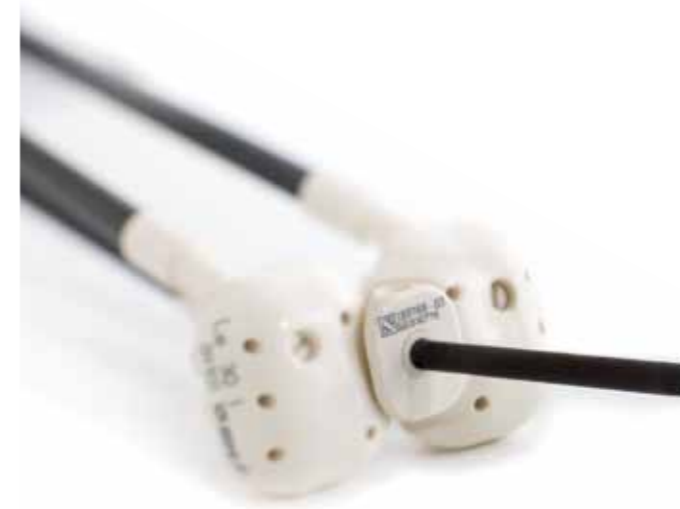
- User manual 090.620.

Accessories for Gynecology Applicators

Intrauterine Tube (4 mm)

The ø 4 mm Intrauterine Tubes are specifically developed for use with gynecologic CT/MR applicators. Their thin diameter facilitates easy insertion, while the inner lumen allows use of MR Line Markers to visualize and reconstruct the source path on MRI.

Part Number	Description	Intrauterine Tube for use with:					
		189.730 Fletcher CT/MR Applicator	110.270 Utrecht Interstitial CT/MR Applicator	101.020 Standard CT/MR Ap- plicator	101.035 CT/MR Ring Applicator	189.569/699/792 Vienna Ring CT/MR Applicator	110.330/331/332 Interstitial Ring CT/MR Applicator
110.296	Intrauterine Tube (4 mm), 15° Incl. Special Stopper (part # 110.326)	x	x				
110.298	Intrauterine Tube (4 mm), 30° Incl. Special Stopper (part # 110.326)	x	x				
110.300	Intrauterine Tube (4 mm), 45° Incl. Special Stopper (part # 110.326)	x	x				
110.302	Intrauterine Tube (4 mm), l=50 mm, 40° Incl. Special Stopper (part # 189.768)			x			
110.303	Intrauterine Tube (4 mm), l=40 mm, 30°				x		
110.304	Intrauterine Tube (4 mm), l=40 mm, 45°				x		
110.305	Intrauterine Tube (4 mm), l=20 mm, 60°				x	x	x
110.306	Intrauterine Tube (4 mm), l=40 mm, 60°				x	x	x
110.307	Intrauterine Tube (4 mm), l=60 mm, 60°				x	x	x
Optional Rectal Retractors, for use in combination with Intrauterine Tube 4 mm and specific applicator							
110.315	Rectal Retractor 30 mm with slot	x	x				
110.335	Rectal Retractor 40 mm with slot	x	x				
101.057	Rectal retractor 60°					x	x
	No special rectal retractor required			x	x		

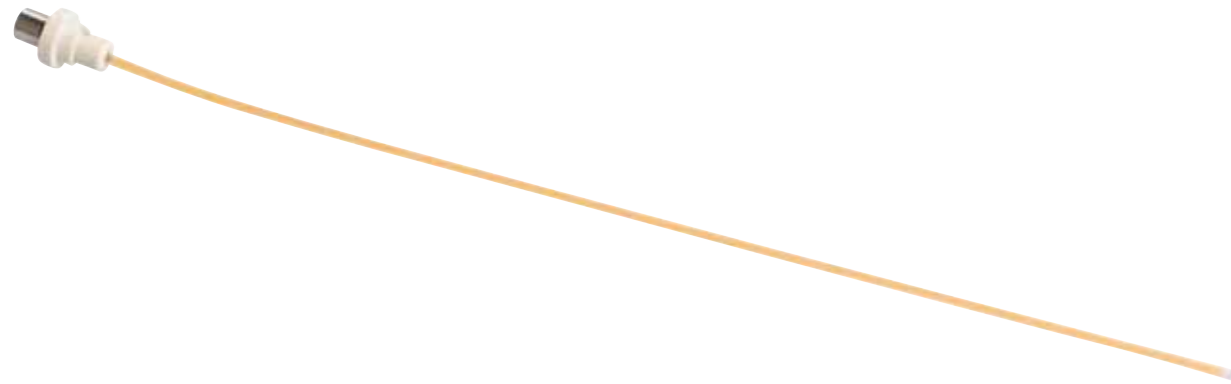


- ø 6 mm Smit Sleeves can be used with the 4 mm Intrauterine Tubes.
- The Intrauterine Tubes can be sterilized using steam sterilization and EtO.
- User manual 777.00088.

MR Line Marker Set

The MR Line Marker is used to make the source path of gynecologic CT/MR applicators visible with MR-imaging. The Line Marker, consisting of a plastic tube to be filled with fluid, is placed inside the source channel of the applicators. The set contains four Line Markers.

Part Number	Description
110.290	MR Line Marker Set



- Delivered non-sterile and not filled with fluid.
- User manual 777.00081.

Smit Sleeve

The Smit Sleeve is designed for fractionated endometrial treatment. The Smit Sleeve is a plastic tube with drainage holes that is inserted into the cervical os and sutured in place prior to the first treatment.

With the Smit Sleeve the cervix remains dilated for subsequent applicator insertions throughout the course of treatment. The Smit Sleeve provides tissue spacing to reduce mucosal dose. It also acts as a cervical stopper.



Smit Sleeve, ø 6 mm



Smit Sleeve, ø 9 mm

Smit Sleeve, ø 6 mm (Boxes of 10)

For Intrauterine Tubes up to ø 4 mm

Part Number	Description
189.676	Smit Sleeve, l=20 mm
189.677	Smit Sleeve, l=40 mm
189.679	Smit Sleeve, l=60 mm
189.681	Smit Sleeve, l=70 mm
189.682	Smit Sleeve, l=80 mm
189.683	Smit Sleeve, l=100 mm

Smit Sleeve, ø 9 mm (Box of 10)

For Intrauterine Tubes of ø 6 mm

Part Number	Description
189.566	Smit Sleeve CT/MR, l=40 mm

- Can remain in place up to 28 days.
- All Smit Sleeves are CT and MR compatible.
- Come sterilized, are single-packed, and for single use only.
- User manual 090.712.

Bronchus

Lumencath Applicator Set	52
Fritz Adjustable Intraluminal Applicator Set	54

Esophagus

Bonvoisin-Gérard Esophageal Applicator Set	56
Esophageal Applicator Set	58

Alternative for Esophageal brachytherapy

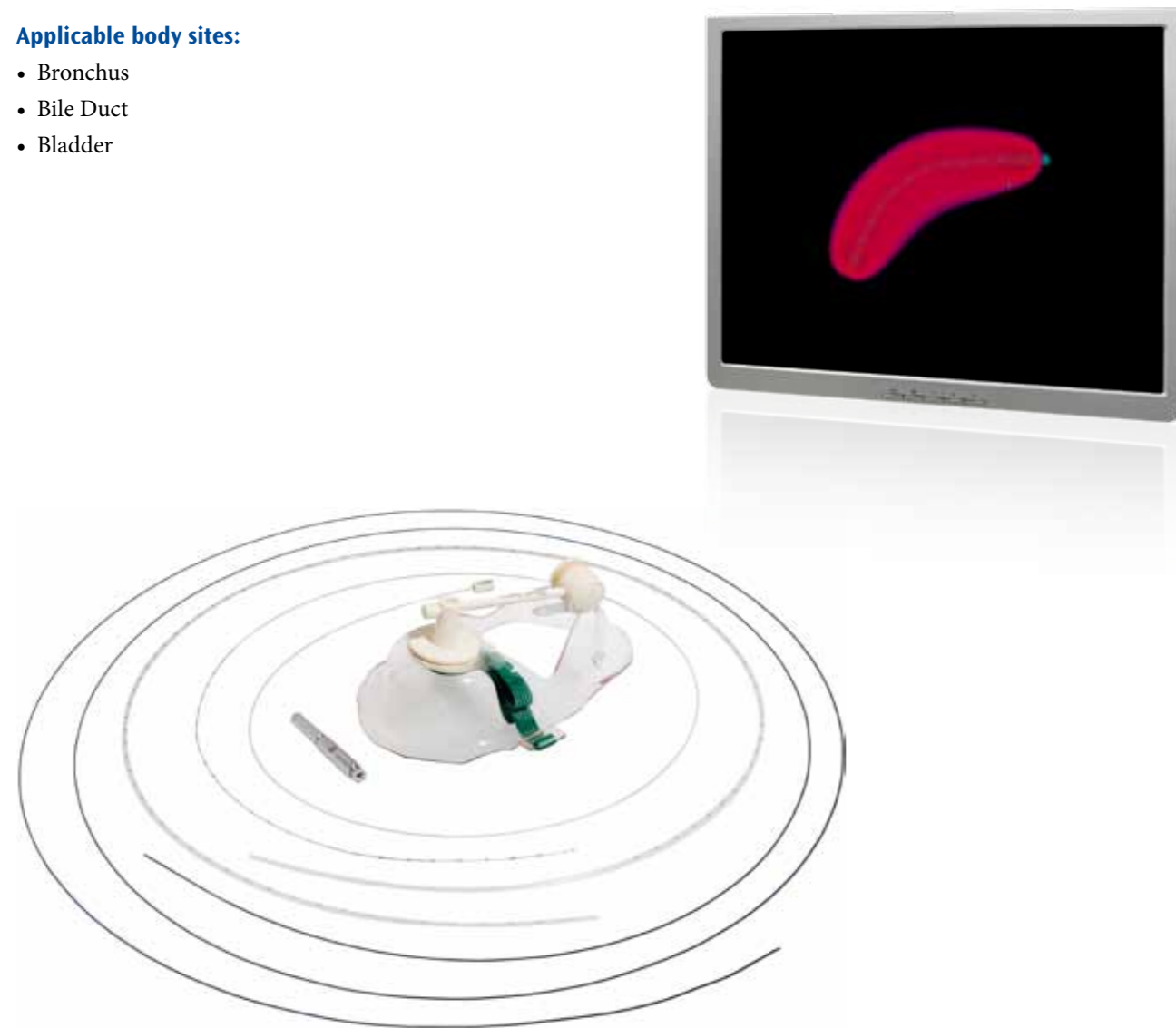
Fritz Adjustable Intraluminal Applicator Set	54
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Lumencath Applicator Set

- Accurate catheter placement through visual guidance
- Optimal control over insertion depth
- Catheters delivered sterilized for immediate clinical use

Applicable body sites:

- Bronchus
- Bile Duct
- Bladder



The Lumencath Applicator Set is specially designed to fit into the channel of a bronchoscope for endobronchial brachytherapy. The Lumencath treatment catheter can therefore be positioned into the treatment area under direct visual control. The low friction material of the catheter allows optimal flexibility during insertion as well as a smooth transfer of the source during treatment. The Lumencath treatment catheters are equipped with centimeter scales for optimal control over the insertion depth. The Lumencath Applicator Set can also be used to treat various other body sites that allow insertion of such flexible catheters.

* Please note that the connector and fixing mask are not MR safe.

Order Information for microSelectron

5F, 100 cm Set, part # 189.797

Quantity	Part Number	Description
2	189.773	Lumencath 5F, I=100 cm (pack of 5)
10	083.029	Guide Wire, l=260 cm
1	089.400	X-Ray Catheter Set, l=100 cm
3	080.024	Applicator Adapter 5F
1	084.099	Fixing Mask

* When ordered separately the minimum order quantity is 2 packs.

5F, 150 cm Set, part # 189.798

Quantity	Part Number	Description
2	189.774	Lumencath 5F, I=150 cm (pack of 5)
10	083.029	Guide Wire, l=260 cm
1	089.510	X-Ray Catheter Set, l=150 cm
3	080.024	Applicator Adapter 5F
1	084.099	Fixing Mask

* When ordered separately the minimum order quantity is 2 packs.

6F, 100 cm Set, part # 189.795

Quantity	Part Number	Description
2	189.771	Lumencath 6F, I=100 cm (pack of 5)
10	083.029	Guide Wire, l=260 cm
1	089.400	X-Ray Catheter Set, l=100 cm
3	080.026	Applicator Adapter 6F
1	084.099	Fixing Mask

* When ordered separately the minimum order quantity is 2 packs.

6F, 150 cm Set, part # 189.796

Quantity	Part Number	Description
2	189.772	Lumencath 6F, I=150 cm (pack of 5)
10	083.029	Guide Wire, l=260 cm
1	089.510	X-Ray Catheter Set, l=150 cm
3	080.026	Applicator Adapter 6F
1	084.099	Fixing Mask

* When ordered separately the minimum order quantity is 2 packs.

Order Information for Flexitron

5F, 140 cm Set, part # 110.600

Quantity	Part Number	Description
2	110.601	Lumencath 5F, I=1400 mm (pack of 5)
10	083.029	Guide Wire, l=260 cm
1	137.673	X-ray catheter 1400 mm - channel 1
3	137.064	Applicator Adapter 5F
1	084.099	Fixing Mask

* When ordered separately the minimum order quantity is 2 packs.

Accessories

Part Number	Description
189.773	Lumencath 5F, 100 cm (pack of 5)
189.774*	Lumencath 5F, 150 cm (pack of 5)
189.771	Lumencath 6F, 100 cm (pack of 5)
189.772*	Lumencath 6F, 150 cm (pack of 5)
110.601	Lumencath 5F, 140 cm (pack of 5)
137.064**	Adaptor for 5F catheters
137.674	X-ray marker 1400 mm - channel 2

*Can only be used with microSelectron.

**Can only be used with Flexitron.

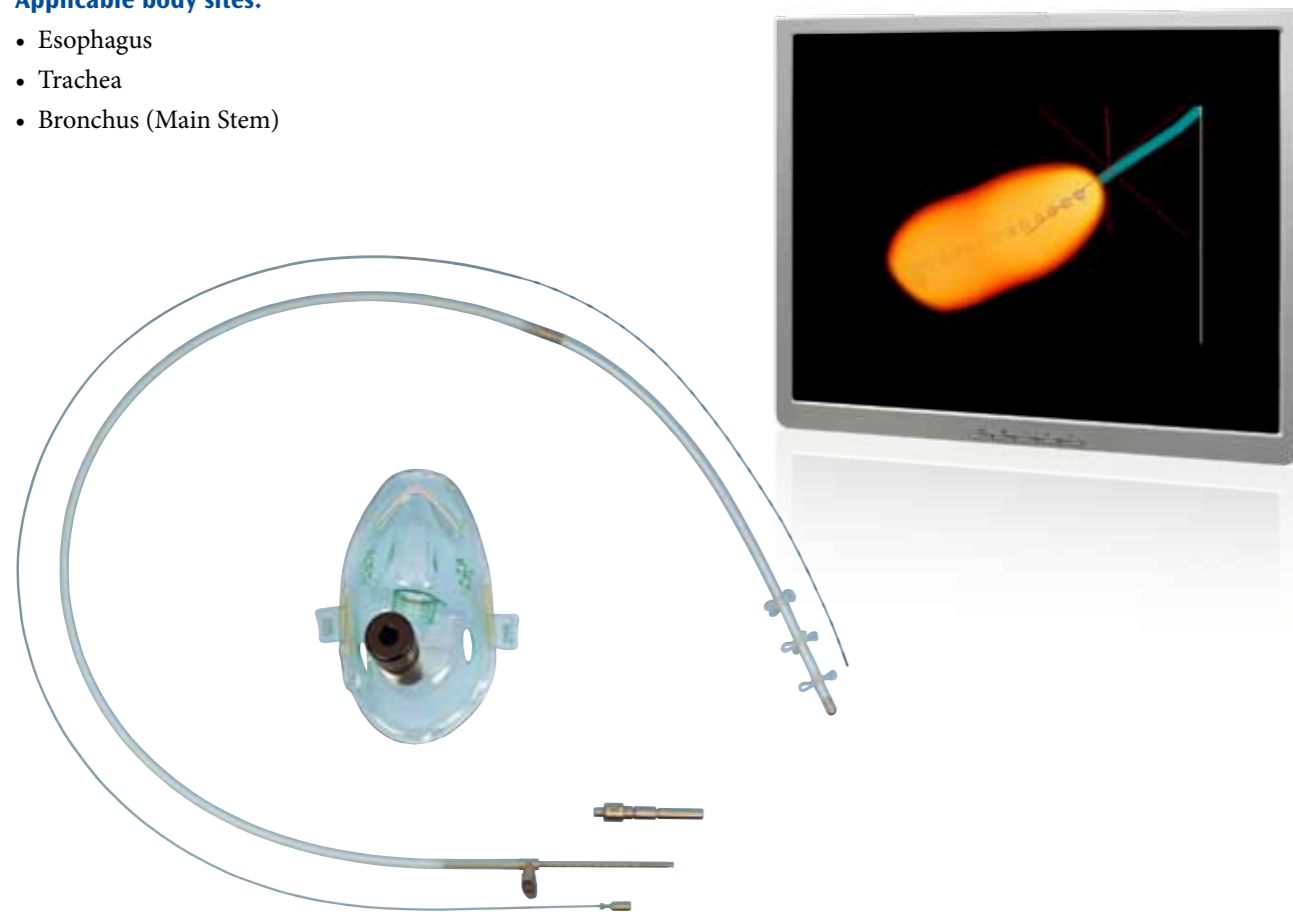
- Lumencath catheters come sterilized, are single-packed, and are for single use only.
- The minimum curvature radius of the catheters is 20 mm.
- Centimeter scale available on catheter over 85 cm from distal end.
- The fixing mask included can be used for applicator immobilization.
- For microSelectron no transfer tube is required: the applicator set contains an adapter that connects the Lumencath catheter directly to the afterloader.
- For Flexitron, adapter # 137.064 is required for use.
- User manual 090.717.

Fritz Adjustable Intraluminal Applicator Set

- Expandable outer Tube for immobilization and centering within the lumen
- Allows sufficient airflow around the applicator for patient comfort

Applicable body sites:

- Esophagus
- Trachea
- Bronchus (Main Stem)



“The Fritz Adjustable Intraluminal Applicator was developed because it was necessary to center the applicator within the main stem bronchus to avoid a high mucosal dose.”

Prof. Dr. Fritz
Marienkrankenhaus, Siegen, Germany

The Fritz Adjustable Intraluminal Applicator is designed for treatment of the esophagus, trachea or bronchus (main stem). After insertion, the outer tubing expands to center the applicator, assisting in immobilization and centering of the applicator within the lumen. The patient can therefore be treated comfortably with sufficient airflow around the applicator.

Order Information

100 cm Set, part # 085.009

Part Number	Description
089.401	X-Ray Catheter no. 1, 100 cm
084.410	Fixing Mask Set
039.015	Guide Wire, l=1.5 m
084.158	Sterilizing Caps, 3.2 mm
085.028	Flexible Tube, 2 incisions
085.029	Flexible Tube, 3 incisions
085.015	Adjustable Intraluminal, 100 cm
094.361	Sterilization Advice Chart

150 cm Set, part # 085.070

Part Number	Description
089.511	X-Ray Catheter no. 1, 150 cm
084.410	Fixing Mask Set
039.015	Guide Wire, l=1.5 m
084.158	Sterilizing Caps, 3.2 mm
085.028	Flexible Tube, 2 incisions
085.029	Flexible Tube, 3 incisions
085.073	Adjustable Intraluminal, 150 cm
094.361	Sterilization Advice Chart

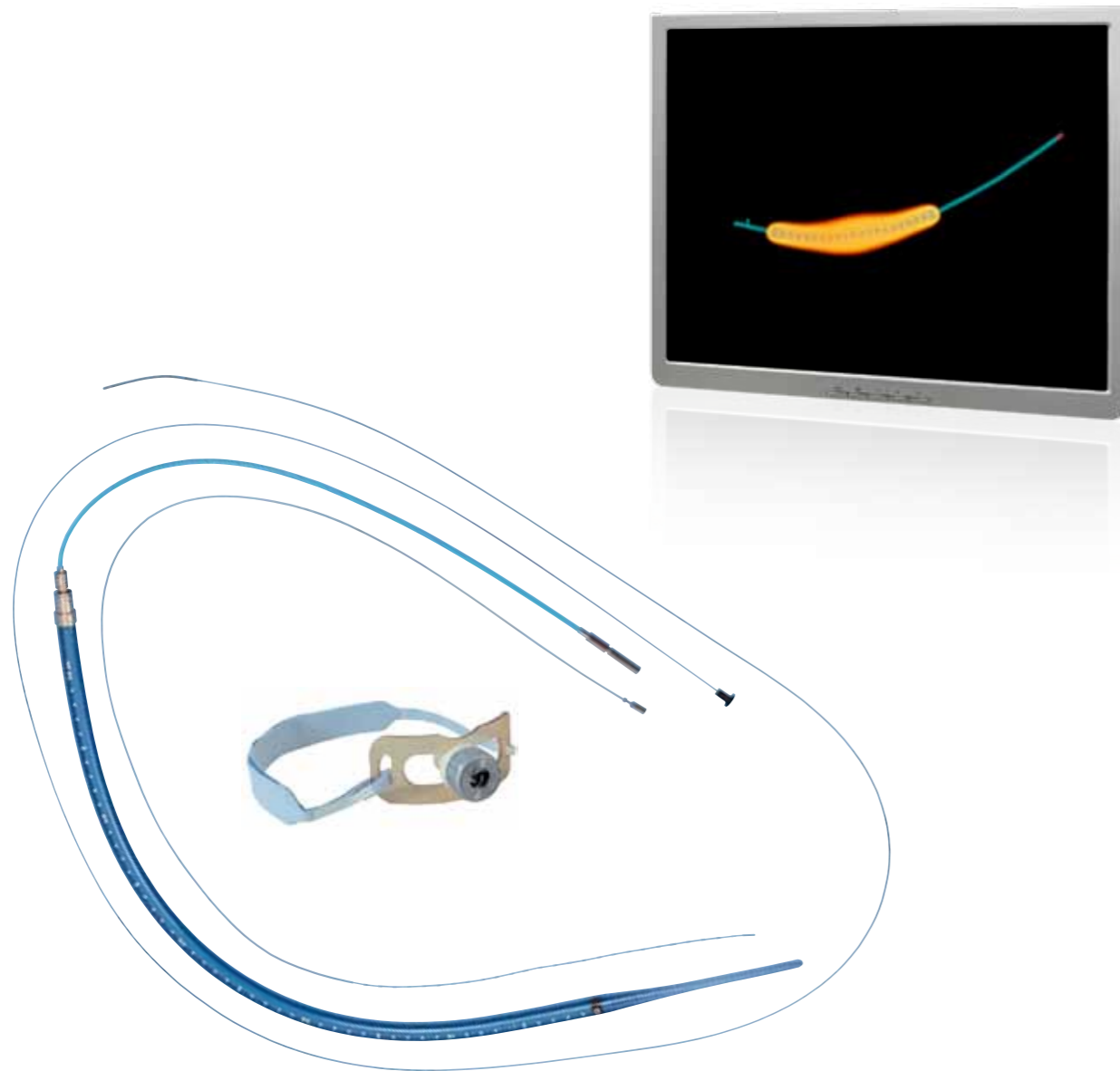
Accessories

Part Number	Description
189.004	Esophageal Fixing Mask Set

- The minimum bending radius is 25 mm.
- The flexible treatment tube comes sterilized for immediate clinical use.
- No transfer tube is required. The applicator set connects directly to the afterloader.
- This applicator set can only be used on microSelectron afterloaders.
- The applicator set can be sterilized using EtO.
- User manual 090.636.

Bonvoisin-Gérard Esophageal Applicator Set

- Easy applicator insertion using endoscopy
- Excellent source centering
- Radio-opaque applicator marking assists placement and localization



The Bonvoisin-Gérard Esophageal Applicator is designed to assist in the treatment of an endoscopically obstructed esophagus. By using this special dilation applicator with tapered flexible tip the treatment area can be reached by bouginage. The bougie tube will also assist in centering the treatment catheter internally to minimize the mucosal dose, while ensuring optimal depth dose penetration of the esophageal wall. Radiographic markers on the bougie tube aid in fluoroscopic placement and localization of the applicator.

Order Information for microSelectron

Complete Set, part # 085.035

Part Number	Description
085.036	Treatment Tube
085.037	Bougie Tube, d=13 mm
189.004	Esophageal Fixing Mask Set
592.973	Guide Wire, l=2 m
089.401	X-Ray Catheter # 1, 100 cm
084.170	Sterilizing Caps, 6 mm, 50 pieces
094.353	Sterilization Advice Chart

Order Information for Flexitron

Complete Set, part # 137.258

Part Number	Description
137.259	1400 mm flexible treatment catheter
137.261	Bonvoisin Gerard esophageal appl., 18F (Ø 6 mm)
137.263	Bonvoisin Gerard esophageal appl., 24F (Ø 8 mm)
137.265	Bonvoisin Gerard esophageal appl., 30F (Ø 10 mm)
137.276	Applicator fixation Mask
137.277	Applicator cleaning accessories
137.279	Applicator Mask strap (pack of 5)

Accessories for microSelectron Set

Part Number	Description
085.033	Bougie Tube, d=10 mm
085.034	Bougie Tube, d=15 mm

Accessories for Flexitron Set

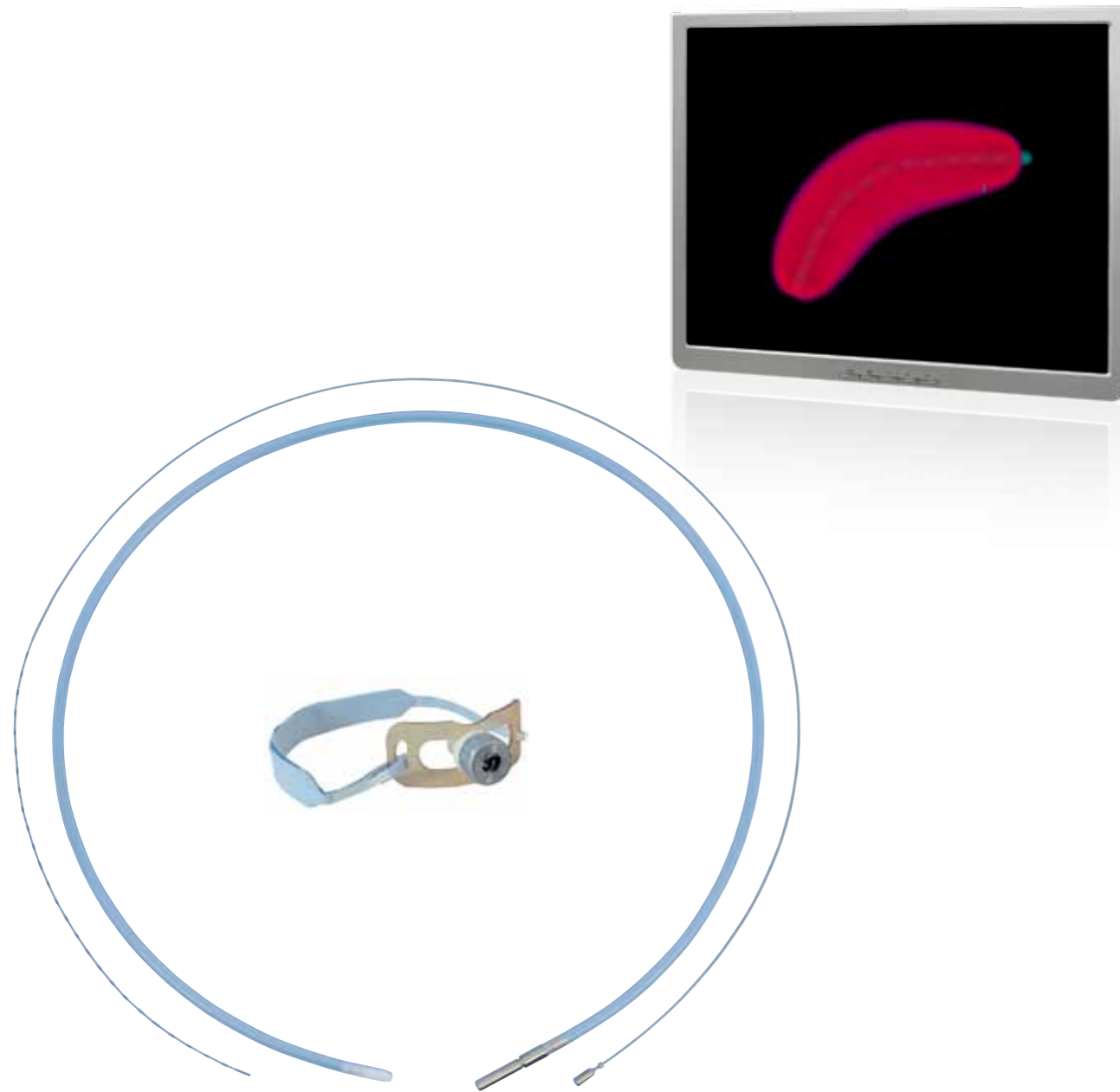
Part Number	Description
137.267	Applicator 36F (Ø 12 mm)
137.270	Applicator 45F (Ø 15 mm)
137.278	Guide Wire Pack of 5 pcs (sterile)
137.064**	Adaptor for 5F catheters

** Required for use with Flexitron.

- No transfer tube is required. The applicator set connects directly to the afterloader.
- Separate applicator sets are available for Flexitron and microSelectron afterloaders.
- Refer to the applicable manual for sterilization advice.
- User manual: 090.628 for #085.035; 777.00116 for #137.258.

Esophageal Applicator Set

- Specific outer applicator surface reduces dose to mucosa
- Easy applicator insertion using fluoroscopy



The Esophageal Applicator is designed for direct insertion into the esophagus. The applicator can be positioned orally under fluoroscopy or endoscopic examination. It is provided with an additional outer layer to reduce the dose to the esophageal mucosa and support applicator integrity.

Order Information

8 mm, 100 cm Set, part # 085.005

Quantity	Part Number	Description
2	085.006	Esophageal Applicator, d=8 mm, 100 cm
1	189.004	Esophageal Fixing Mask Set
1	039.015	Guide Wire, l=1.5 m
1	089.401	X-Ray Catheter # 1, 100 cm
1	084.170	Sterilizing Caps, 6 mm, 50 pieces
1	094.356	Sterilization Advice Chart

6 mm, 100 cm Set, part # 084.011

Quantity	Part Number	Description
2	084.012	Esophageal Applicator, d=6 mm, 100 cm
1	189.004	Esophageal Fixing Mask Set
1	039.015	Guide Wire, l=1.5 m
1	089.401	X-Ray Catheter # 1, 100 cm
1	084.170	Sterilizing Caps, 6 mm, 50 pieces
1	094.356	Sterilization Advice Chart

6 mm, 150 cm Set, part # 085.055

Quantity	Part Number	Description
2	085.056	Esophageal Applicator, d=6 mm, 150 cm
1	189.004	Esophageal Fixing Mask Set
1	039.015	Guide Wire, l=1.5 m
1	089.511	X-Ray Catheter # 1, 150 cm
1	084.170	Sterilizing Caps, 6 mm, 50 pieces
1	094.356	Sterilization Advice Chart

Accessories

Part Number	Description
085.007	Esophageal applicator, d=8 mm, 150 cm (for part # 085.055)
085.006	Esophageal applicator, d=8 mm, 100 cm (for part # 084.011)
084.012	Esophageal applicator, d=6 mm, 100 cm (for part # 085.005)
189.004	Esophageal Fixing Mask Set

- The minimum curvature is 25 mm.
- No transfer tube is required. The applicator connects directly to the indexer.
- This applicator set can only be used on microSelectron afterloaders.
- The applicator can be sterilized using EtO.
- User manual 090.607.

Breast Templates

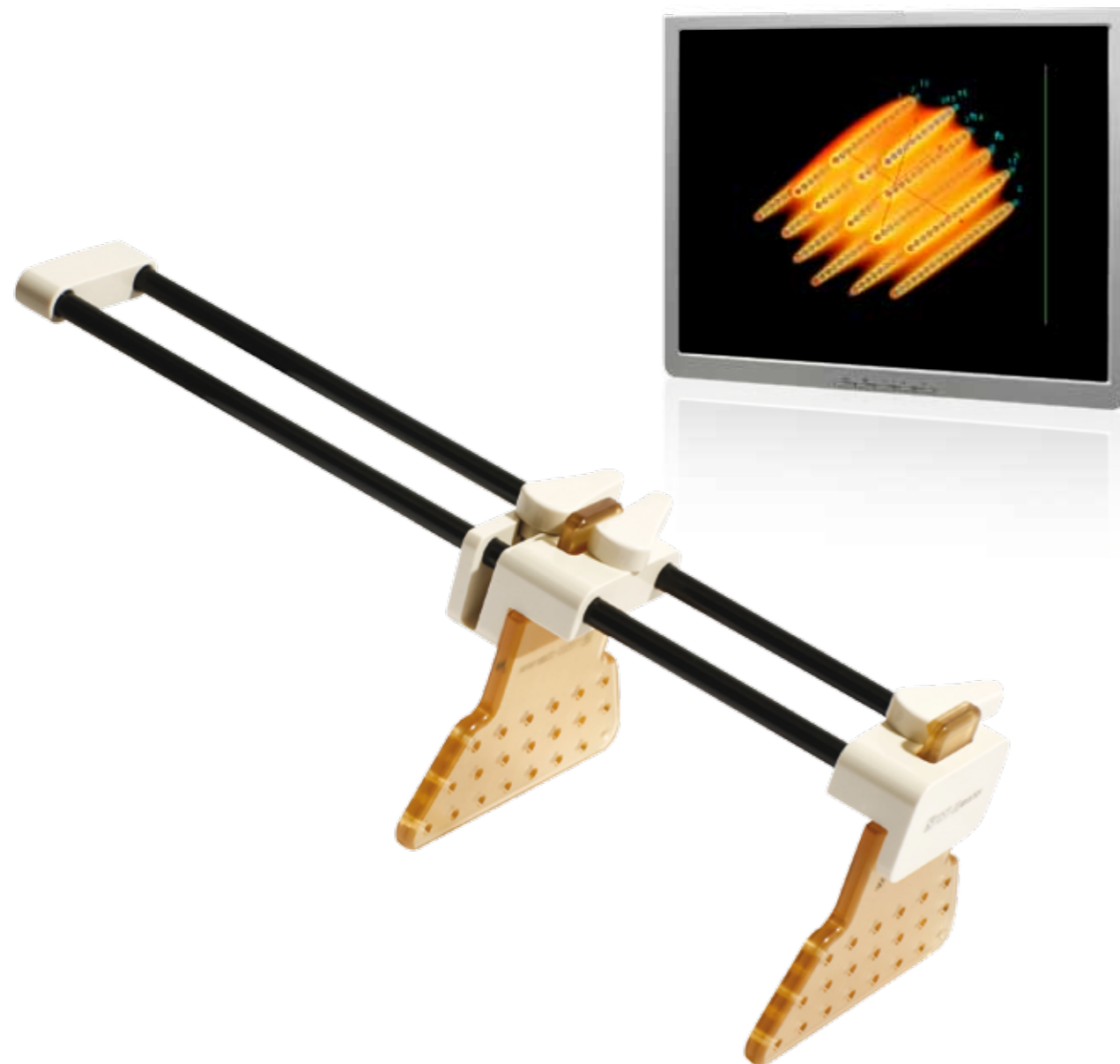
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OncoSmart Catheters

OncoSmart Catheter System	66
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Breast CT/MR Template Set

- Supports optimized implant: fast and easy
- More convenient for the patient
- CT and MR compatible



The Breast CT/MR Template Set is designed to facilitate multi-catheter implants, using CT and MR imaging modalities. The lightweight design of the template provides patient comfort and makes handling the template during the needle insertion simple and quick. A range of template configurations are included in the set, offering a choice in templates that best fit the implant. Each template configuration provides a dose distribution according to the 'Paris Dosimetry System'.

Order Information

Breast CT/MR Template Set, part # 110.518

Part Number	Set components
110.517	Adjustable template bridge
110.536	Set of template levers
110.516	Double Plane, 10 mm Template Pairs, 5 Pairs: 3-4, 4-5, 5-6, 6-7 and 7-8 holes.
110.519	Double Plane, 16 mm Template Pairs, 5 Pairs: 3-4, 4-5, 5-6, 6-7 and 7-8 holes.
110.520	Triple Plane, 10 mm Template Pairs, 4 Pairs: 3-4-5, 4-5-6, 5-6-7 and 6-7-8 holes.
110.523	Triple Plane, 16 mm Template Pairs, 4 Pairs: 3-4-5, 4-5-6, 5-6-7 and 6-7-8 holes.

Accessories

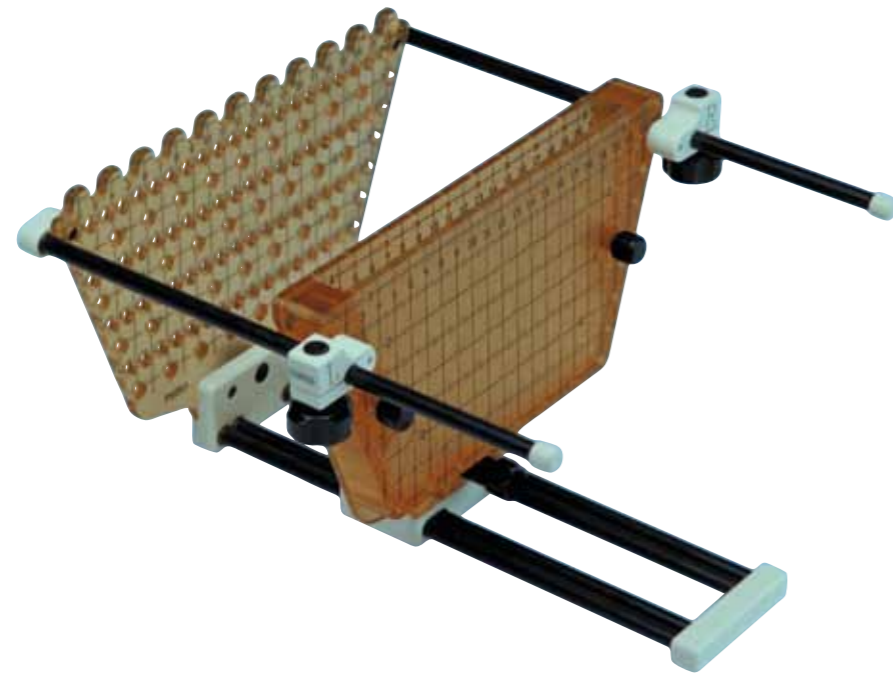
Part Number	Set components
110.528	Double Plane, 12 mm Template Pairs, 5 Pairs: 3-4, 4-5, 5-6, 6-7 and 7-8 holes.
110.529	Double Plane, 14 mm Template Pairs, 5 Pairs: 3-4, 4-5, 5-6, 6-7 and 7-8 holes.
110.530	Double Plane, 18 mm Template Pairs, 5 Pairs: 3-4, 4-5, 5-6, 6-7 and 7-8 holes.
110.532	Triple Plane, 12 mm Template Pairs, 4 Pairs: 3-4-5, 4-5-6, 5-6-7 and 6-7-8 holes.
110.533	Triple Plane, 14 mm Template Pairs, 4 Pairs: 3-4-5, 4-5-6, 5-6-7 and 6-7-8 holes.
110.534	Triple Plane, 18 mm Template Pairs, 4 Pairs: 3-4-5, 4-5-6, 5-6-7 and 6-7-8 holes.
various*	Proguide needles 5F and 6F
various*	Metal needles ø1.5 and ø1.9 mm
various*	OncoSmart catheter system

* See relevant section

- The breast CT/MR Template Set can be sterilized using steam sterilization.
- User manual 777.00141.

Kuske Breast Applicator Set

- Designed for optimal fit with patient anatomy
- Optimal target coverage, including wide volumes
- Excellent dose conformity



“The applicator enables the user to create large volume breast implants. The adjustable template has an integrated guiding template which ensures an exact placement of needles and flexible implants or OncoSmart Catheters. Also the single large template has a special hole-geometry. The result is an excellent coverage of the target volume and an optimized conformity with the patient’s anatomy.”

R. Kuske M.D.
Arizona Oncology Services - Scottsdale, AZ, USA

The Kuske Breast Applicator Set was developed in close cooperation with Dr. Robert Kuske. The adjustable template with integrated guiding plate ensures exact placement of needles and OncoSmart Catheters or Flexible Implant Tubes. The single large template pair with special hole geometry ensures optimal coverage of the complete target volume. Markers are integrated in the template to aid the imaging procedures and provide the opportunity to optimize positioning of the template.

* Please note that the connector and fixing mask are not MR safe.

Order Information

Kuske Breast Applicator Set, part # 189.006

Quantity	Part Number	Description
1	189.012	Kuske Breast Template Set
4	189.307	Leader Insertion Needle, 1.5 x 200 mm (box of 36)
1	189.231	Insertion Tool
6	189.445	CT/MR Flexible Implant Tube, 6F, Single Leader, 30 cm (box of 36)
1	189.458	Radio Lucent Button white, 6F (box of 72)
1	189.460	Radio Lucent Button black, 6F (box of 72)
1	189.462	Radio Lucent Button red, 6F (box of 72)
1	189.464	Radio Lucent Button blue, 6F (box of 72)
1	189.466	Radio Lucent Button green, 6F (box of 72)
1	189.041	Cleaning Brush ø 3 x 100 (Set of 3)
1	189.043	Cleaning Brush ø 6.5 x 100 (Set of 3)
1	189.367	Cutter Flexible Implants

Kuske Breast Template Set, part # 189.012

Quantity	Part Number	Description
1	189.015	Kuske Breast Template Holder
1	189.026	Left Template Clamp
1	189.027	Right Template Clamp
1	189.046	Implant Template
1	189.047	Target Template
1	189.048	Guiding Template
2*	189.222	Implant Template Fixation Nut
2	189.223	Bridge Fixation Nut
2	189.224	Target Template Fixation Nut
2	189.225	Slide Fixation
2*	189.226	Guiding Template Fixation Nut
1	094.446	Sterilization Advice Chart

* When ordered separately, the minimum order quantity is 5 pieces.

Accessories

Part Number	Description
594.456	Emergency Button Cutter
189.468	Radio-Lucent Button yellow, 6F, (box of 72)
189.470	Radio-Lucent Button brown, 6F, (box of 72)
089.420	X-Ray Catheter Set, 30 cm (1-18)
030.100	Push-Fit Disconnection Tool
089.348	Kink Protection Tube for 6F Flexible*
089.345	Kink Protection Tube for Transfer Tube*

* Minimum order quantity is 50 pieces.

- The Kuske Breast Template Set can be sterilized using EtO.
- User manual 090.706.

OncoSmart Catheter System

- Supporting outpatient treatments
- Minimum patient discomfort between fractions
- Quick and accurate reconnection for follow-up fractions



Applicable body sites:

- Breast
- Head & Neck
- Sarcomas
- Tongue



The OncoSmart Catheter System is a treatment solution designed for breast irradiation in APBI Settings. It creates the opportunity for treating patients on an outpatient basis with minimum discomfort for the patient. Treatment catheters are inserted during the actual treatment only. Between fractions, the treatment catheters are removed and only a set of flexible guiding catheters remains in place with small buttons to lock them in the treatment area. These buttons are pre-numbered for quick, accurate and easy Setup at every treatment fraction. The two-part catheter design reduces the risk of catheters kinking during insertion or between fractions.

OncoSmart Catheter Sets can be used for other treatments as well, for example head and neck tumors and sarcomas. OncoSmart Catheter Sets are available for use with CT and MR imaging modalities. The sets contain radio-lucent buttons for optimal visualization.

* Please note that the insertion needles are not MR safe.

Order Information

CT/MR OncoSmart Catheter Sets

Part Number	Description
189.416	CT/MR OncoSmart Catheter Set, L=240 mm (contains 30 Flexible implant tubes, 4F Proguide needles (240 mm), stoptags, buttons, and insertion needles (200 mm))
189.418	CT/MR OncoSmart Catheter Set, L=240 mm (contains 18 Flexible implant tubes, 4F Proguide needles (240 mm), stoptags, buttons, and insertion needles (200 mm))
189.802	CT/MR OncoSmart Catheter Set, L=240 mm, single package (contains 6 Flexible implant tubes, 4F Proguide needles (240 mm), stoptags, buttons, and insertion needles (200 mm))
189.801	CT/MR OncoSmart Catheter Set, L=200 mm, for Head & Neck (contains 6 Flexible implant tubes, 4F Proguide needles (200 mm), stoptags, buttons, and insertion needles (160 mm))
189.840	CT/MR OncoSmart Catheter Set, L=294 mm (contains 30 Flexible implant tubes, 4F Proguide needles (294 mm), stoptags, buttons, and insertion needles (280 mm))
189.846	CT/MR OncoSmart Catheter Set, L=294 mm (contains 30 Flexible implant tubes, 4F Proguide needles (294 mm), stoptags, buttons, and insertion needles (200 mm))

CT/MR OncoSmart Catheter Set, part # 189.410

Quantity	Part Number	Description
5	189.418	CT/MR OncoSmart Catheter Set, L=240 mm (contains 18 Flexible implant tubes, 4F Proguide needles (240 mm), stoptags, buttons, and insertion needles (200 mm))
1	189.016	OncoSmart Flange Molding Set

OncoSmart Introduction Set for microSelectron, part # 103.111

Part Number	Description
189.410	CT/MR OncoSmart Catheter System
189.012	Kuske Breast Template Set
189.231	Insertion Tool
189.036	CT-Marker Set, 240 mm, Black
030.100	Push Fit Disconnection Tool
111.071	Transfer Tube Set for 4F Flexible (1-9)
111.081	Transfer Tube Set for 4F Flexible (10-18)

OncoSmart Upgrade Set for microSelectron, part #103.110

Part Number	Description
189.410	CT/MR OncoSmart Catheter System
189.036	CT/MR OncoSmart Catheter System
030.100	Push Fit Disconnection Tool
111.071	Transfer Tube Set for 4F, Flexibles (1-9)
111.081	Transfer Tube Set for 4F, Flexibles (10-18)

OncoSmart Flange Molding Set, part # 189.016

Quantity	Part Number	Description
1	189.320	Flange Molding Tool
2	417.018	Li-ion Battery Pack
1	417.006	Battery Charge Station
1	189.316	Flange Molding Cutter
1	189.367	Cutter Flexible Implants
1	189.369	Spare part set Flange Molding Tool

- The Catheter Set contents are for single use only, and come sterilized, with the exception of the 4F ProGuide Needles and the Stoptags.
- Set contents are packed per 6 items, except for # 189.802.
- User manual 090.709.

Prostate

Martinez Prostate Template Set	70
Prostate Stepper Template Set	72

Rectum

MUPIT Applicator Set	74
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Alternatives for rectal brachytherapy

Prostate Stepper Template Set
Vaginal CT/MR Applicator Set
Shielded Cylindrical Applicator Set

Alternatives for bladder brachytherapy

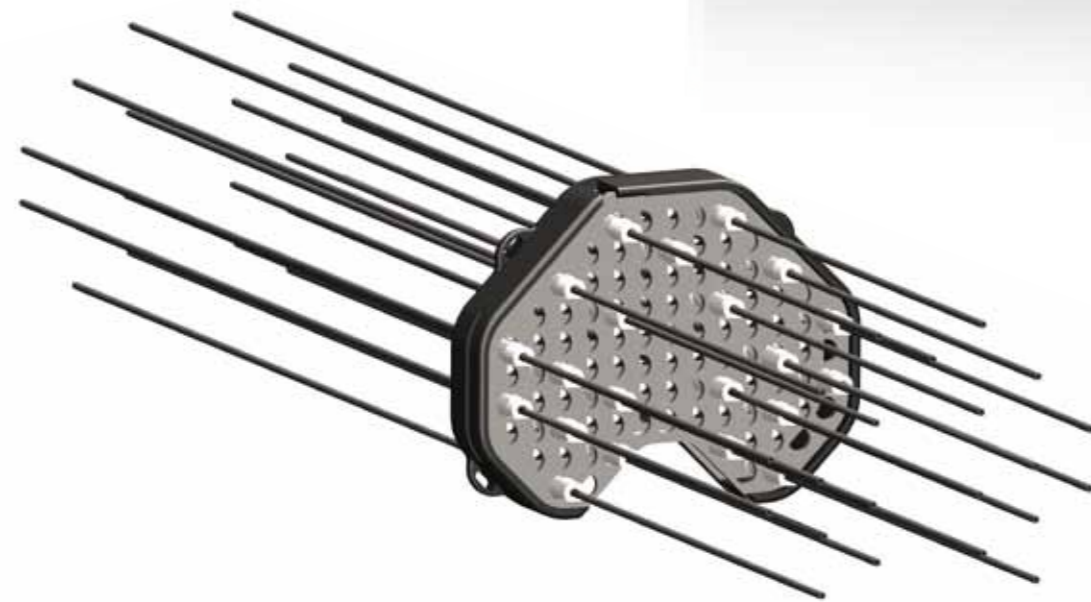
Lumencath Applicator Set

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Martinez Prostate Template Set

- Small ultra light template
- Individual needle locks for various needle sizes
- No readjustments after insertion
- Quick implant removal
- Can be used with a stepper or freehand technique
- No tools needed for disassembly



The Martinez Brachytherapy Prostate Template for PDR & HDR Brachytherapy has been designed to assist in enhancing precision. The ultra light template locks to the stepper or stabilizer during insertion and guides needles under ultrasound imaging. The needles can be individually re-positioned and locked for treatment. The individual locking insert ensures that the position of each needle will remain unchanged when adjusting another needle.

Order Information

Complete Set, part # 137.280

Part Number	Description
137.281	Prostate Template consisting of: Template holder for RTP stepper Template fixation pins (2 pcs) Lock inserts for 5F plastic needles (pouch of 20 pcs) (black)
137.290	Needle Lock Tool
137.285	Template Fixation Pins Set

Accessories

Part Number	Description
137.286	Lock Inserts Set for 5F Plastic Needles
137.287*	Lock Inserts Set for 6F Plastic Needles
137.288	Lock Inserts Set for 7F Plastic Needles
137.289	Lock Inserts Set for 1.5 mm Metal Needles
137.282	Template Holder for RTP stepper
137.283	Template Holder for Accuseed stepper
137.284	Template Holder for D&K & Civco classic Accucare stepper
various**	ProGuide Needles 5F
various**	ProGuide Needles 6F
various**	Ø1,5 mm needles
various**	Ø1.9 mm needles

* 6F inserts can also be used for Ø 1.9 mm metal needles.

** See section Needles & Flexible Implant Tubes.

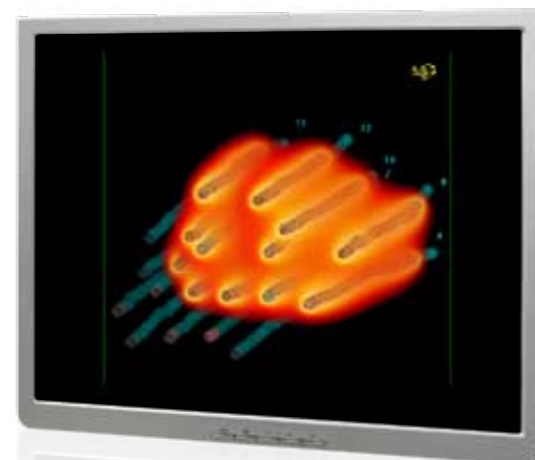
- The Template Set can be sterilized using steam sterilization.
- User manual 777.00117.

Prostate Stepper Template Set

- Universal grid array for guidance of needles
- All needles locked in a single movement
- Lightweight template
- Compatible with a wide range of stepper devices

Applicable body sites:

- Prostate
- Vagina
- Perineum
- Rectum



The Prostate Stepper Template Set provides a helpful solution for applying interstitial techniques in high dose rate prostate treatments. The square lightweight stepper template has a universal grid array and can be sutured to the patient. It is placed in a stepper holder and the mounted onto a stepper device. The stepper holder is available for various ultrasound stepper devices. To place the needles in the desired position, grid face plates matching the ultrasound image grid are mounted on the stepper holder.

The advanced needle fixation design uses a plate that locks all needles in a single action. The Prostate Stepper Template can be used with either metal needles or the high-performance ProGuide plastic needles.

Order Information

Complete Clinical Set 5F, part # 189.069

Quantity	Part Number	Description
1	189.066	Prostate Stepper Template, 5F
2	189.604	OncoSmart ProGuide Sharp Needle Set, 5F x 240 mm

Complete clinical Set 6F, part # 189.070

Quantity	Part Number	Description
1	189.067	Prostate Stepper Template, 6F
2	189.602	OncoSmart ProGuide Sharp Needle Set, 6F x 200 mm

Prostate Stepper Template Set, 5F part # 189.066

Quantity	Part Number	Description
1	189.157	Base Plate Stepper 5F
1	189.160	Front Plate Stepper 5F
1	189.166	Fixation Plate Support Assy
1	189.164	Disposable Fixation Plates 5F, 10 pieces
1	189.167	Eccentric Axle
2	189.170	Assembly Bolt Template
1	189.205	Assembly Screwdriver
1	189.173	Fixation Screwdriver
1	189.041	Cleaning Brush Set ø3 x 100 mm
1	189.043	Cleaning Brush Set ø6.5 x 100 mm

Prostate Stepper Template Set, 6F part # 189.067

Quantity	Part Number	Description
1	189.158	Base Plate Stepper 6F
1	189.161	Front Plate Stepper 6F
1	189.166	Fixation Plate Support Assy
1	189.165	Disposable Fixation Plates 6F (10 pcs)
1	189.167	Eccentric Axle
2	189.170	Assembly Bolt Template
1	189.205	Assembly Screwdriver
1	189.173	Fixation Screwdriver
1	189.041	Cleaning Brush Set ø3 x 100 mm
1	189.043	Cleaning Brush Set ø6.5 x 100 mm

Fixation Plates

Part Number	Description
189.164	Set of 10 disposable Fixation Plates, 5F (5x2)

Fixation Plates

Part Number	Description
189.164	Set of 10 disposable Fixation Plates, 6F (5x2)

Stepper Holders

Part Number	Description
189.071	Stepper Holder Set, Tayman
189.083	Stepper Holder Assembly, Tayman 44.5 mm
189.075	Stepper Holder Assembly, Tayman 73.4 mm
189.072	Stepper Holder Set, OncoSelect
189.076	Stepper Holder Assembly, OncoSelect
189.092	Stepper Holder Set, B-K
189.095	Stepper Holder Assembly, B&K
189.093	Stepper Holder Set, Barzell-Whitmore
189.096	Stepper Holder Assembly, BW-MB

Grid Face Plates

Part Number	Description
189.073	Grid Face Plate Set, GE/Siemens
189.174	Grid Face Plate, GE/Siemens
189.206	Grid L-frame for GE/Siemens
189.074	Grid Face Plate Set, B&K
189.175	Grid Face Plate, B&K
189.207	Grid L-frame, B&K

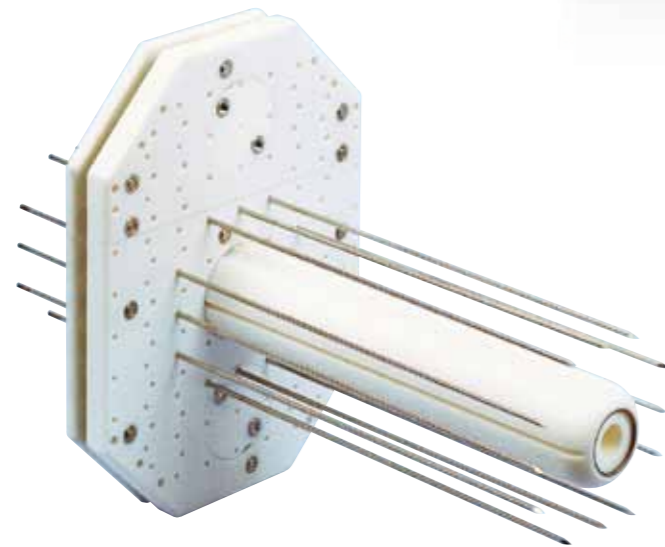
- Holder and grid face plates need to be ordered separately.
- The template parts can be sterilized using steam sterilization and EtO.
- User manual 090.699.

MUPIT Applicator Set

- Easy to use template for a variety of bodysite treatments
- Needle placement provides dose optimization to the area of interest

Applicable body sites:

- Perineum
- Rectum
- Vagina



Order Information

Complete Set Ø 1.5 mm, part # 089.055

Complete Set Ø 1.9 mm, part # 083.570

Complete Sets consist of:

Quantity	Ø 1.5 mm Set Part Number	Ø 1.9 mm Set Part Number	Description
1*	089.056	083.571	MUPIT Template SubSet
35*	083.918	083.054	Trocar Needle 120 mm
35*	083.922	083.058	Trocar Needle 160 mm
35*	083.926	083.062	Trocar Needle 200 mm
3*	089.005	083.254	Obturator 120 mm
3*	089.009	083.258	Obturator 160 mm
3*	089.013	083.262	Obturator 200 mm

* When ordered separately, the minimum order quantity is 10 pieces.

Template Set Ø 1.5 mm, part # 089.056

Template Set Ø 1.9 mm, part # 083.571

Template SubSets consist of:

Quantity	Ø 1.5 mm Set Part Number	Ø 1.9 mm Set Part Number	Description
1	045.459	083.590	Base Plate, small
1	045.457	083.588	Base Plate filler, 12 mm hole
2	045.450		Cover Plate filler, needles
1	045.449		Cover Plate filler, 8 mm hole
1	045.460	083.586	Rectal Cylinder
2*	505.157		Screw for base plate
1	045.458	083.589	Base Plate, large
3	045.456	083.587	Base Plate filler, Needles
1	045.443		Cover Plate
1	045.448		Cover Plate filler, 12 mm hole
1	045.461	083.581	Vaginal Cylinder
3	045.171	083.289	Cylinder Adapter, Needle
14	045.172		Fixing Screw, Cover Plate
2*	505.154		Screw for Cylinder
2*	518.307		Screw for 045.449
1	598.026		Allen Key Screwdriver, 2.5 mm
1	045.004		Torque Screwdriver, 1.27 mm
35*	089.025	045.303	Needle Stopper
2	045.455		Fixing Screw, for 045.449

* When ordered separately the minimum order quantity is 10 pieces.

The Martinez Universal Perineal Interstitial Template (MUPIT) is designed for interstitial placement of needles (1.5 mm or 1.9 mm) to treat cancer in the perineum, rectum or vagina. The periphery of the template has angled holes for the needles to reach the widest tumor spread. Rectal and vaginal cylinders are included to provide better template stability and additional treatment options.

- Only metal needles (Ø 1.5 or 1.9 mm) can be used with these sets. ProGuide needles cannot be used.
- The applicator can be sterilized using steam sterilization or EtO.
- User manual 090.629.

Intracavitary Mold Applicator Set

- For down-sizing and down-staging of tumor

Applicable body sites:

- Rectum



The Intracavitary Mold applicator is an innovative solution in the management of rectal cancers. The Intracavitary Mold is used pre-operatively in treatment regimens aimed at reducing the tumor size, either as the sole modality in delivering the desired dose, or as a boost alongside EBRT. The flexibility of the Intracavitary Mold applicator assists in adjusting to the rectal curvature, and ensures patient comfort. The eight radially distributed treatment catheters just below the surface of the cylinder ensure perfect coverage of the target volume while sparing adjacent healthy tissue.

The Intracavitary Mold applicator has been developed in collaboration with Dr. T. Vuong of the McGill University Health Center in Montreal, Canada, in support of their neoadjuvant treatment for patients with resectable rectal cancer[1],[2].

[1] Vuong T, et al, High Dose Rate Endorectal Brachytherapy as a Neoadjuvant Treatment for Patients with Resectable Rectal Cancer. Clin Oncol 2007; 19: 701-705.

[2] Poon et al. Dosimetric characterization of a novel intracavitary mold applicator for 192Ir high dose rate endorectal brachytherapy treatment. Med. Phys.2006; 33: 4515-4526.

Order Information for microSelectron

Intracavitary Mold Applicator Set, part # 189.011

Part Number	Description
189.094	Intracavitary Mold Set, ø 20 mm (box of 5)
189.099	Support Block
189.256	Number Tag Ring
189.264	Insertion Tool, d=4 mm
189.257	Insertion Tool, d=8 mm
189.277	Insertion Tool, d=10 mm
089.786	Screwdriver
189.040	Cleaning Brush ø 2.5 mm x 250 (Set of 3)
189.043	Cleaning Brush ø 6.5 mm x 100 (Set of 3)

Accessories

Part Number	Description
189.094	Intracavitary Mold Set, Ø20 mm (box of 5)
189.538	Kink Protection Set (box of 5)
189.100	Central Catheter Set (box of 5)
189.932	Applicator Clamp and Base Plate
189.931	Applicator Clamp with Axle

Order Information for Flexitron

Intracavitary Mold Applicator Set Ft, part # 110.224*

- The Intracavitary Molds are single-packed and for single use only.
- Kink protection sets are packed separately, including 5 sets per box.
- The reusable parts of this applicator can be sterilized using steam sterilization (at 134°C / 273°F).
- User manual 090.705.

* Regulatory approval pending.

Rigid Applicators

Valencia Skin Applicator	80
Leipzig Applicator	82

Flexible Applicator

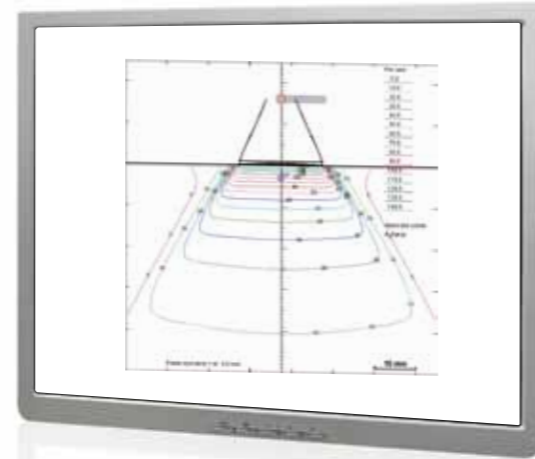
Freiburg Flap Applicator Set	84
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Valencia Skin Applicator

- Non-invasive treatment modality
- Homogeneous and reproducible dose coverage suitable for bigger skin lesions
- Reliable treatment through secured distal reference point for the source in the applicator

Applicable body sites:

- Surface treatments



This unique applicator is a result of cooperation between the La Fé University Hospital, Valencia, Spain and Nucletron. This tungsten shielded HDR applicator is designed for surface lesions, utilizing a contact treatment technique. It is equipped with a unique fixed flattening filter that will provide a flat homogeneous isodose pattern. It can be used for superficial and intra-oral lesions.

Order Information for microSelectron

Valencia Skin Applicator Set, part # 189.701

Quantity	Part Number	Description
1	189.788	Valencia Skin Applicator, d=20 mm
1	189.760	Valencia Skin Applicator, d=30 mm
2	085.115	Cap with marker ring, d=20 mm
2	085.116	Cap with marker ring, d=30 mm
2	085.118	Cap, d=20 mm
2	085.119	Cap, d=30 mm
1	084.158	Sterilization Caps (pack of 50)

Accessories

Part Number	Description
189.786*	Well Chamber Adapter for HDR 1000 PLUS (Standard Imaging, Middleton, Wisconsin)
189.787*	Well Chamber Adapter for TM33004 (PTW, Freiburg Germany)
189.932	CT/MR Applicator Clamp with Base plate
189.931	CT/MR Applicator Clamp with Axle

* Required for use

Advanced Skin Applicator Set, part # 103.118

Part Number	Description
085.041	Leipzig Applicator d=10 mm
085.042	Leipzig Applicator d=20 mm
085.043	Leipzig Applicator d=30 mm
085.114	Cap, d=10 mm with marking ring
085.115	Cap, d=20 mm with marking ring
085.116	Cap, d=30 mm with marking ring
085.117	Cap, d=10 mm
085.118	Cap, d=20 mm
085.119	Cap, d=30 mm
089.095	Freiburg Flap Applicator Set
189.701	Valencia Applicator Set

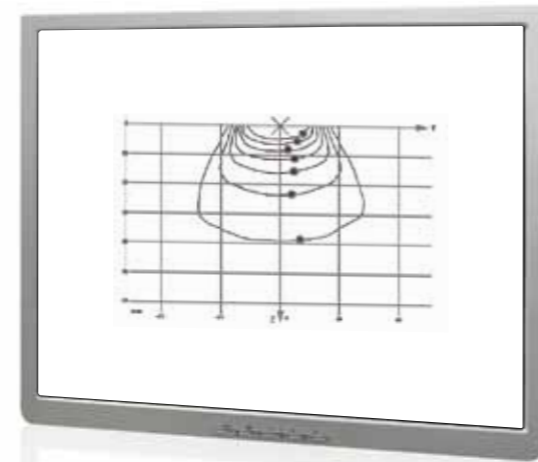
- Applicator provided with two types of treatment caps, for simulation and for treatment.
- Applicator must be used with treatment cap in place.
- The applicator set can be sterilized using steam sterilization and EtO.
- User manual 777.00237.

Leipzig Applicator

- Easy to use
- Perfect for superficial lesions

Applicable body sites:

- Skin & Surface
- Intra-oral treatment
- Vaginal Cuff



“The Leipzig Applicators were designed to give the optimum isodose and treat to the correct depth without causing excessive skin reaction.”

Prof. Dr. Prager
Universität Leipzig, Leipzig, Germany

This applicator is tungsten shielded and designed for treatment of surface lesions, utilizing a contact treatment technique. It can be used for superficial skin, intra-oral and vaginal cuff lesions. It provides an excellent alternative for orthovoltage or electron treatments.

Order Information

Leipzig Applicator Set, part # 085.040

Part Number	Description
085.041	Leipzig Applicator, d=10 mm
085.044	Leipzig Applicator d=10 mm, straight
085.114	Cap, d=10 mm with marker ring
085.117	Cap, d=10 mm
085.042	Leipzig Applicator, d=20 mm
085.045	Leipzig Applicator d=20 mm, straight
085.115	Cap, d=20 mm with marker ring
085.118	Cap, d=20 mm
085.043	Leipzig Applicator, d=30 mm
085.046	Leipzig Applicator d=30 mm, straight
085.116	Cap, d=30 mm with marker ring
085.119	Cap, d=30 mm
084.158	Sterilizing Caps, 3.2 mm

Advanced Skin Applicator Set, part # 103.118

Part Number	Description
085.041	Leipzig Applicator d=10 mm
085.042	Leipzig Applicator d=20 mm
085.043	Leipzig Applicator d=30 mm
085.114	Cap, d=10 mm with marking ring
085.115	Cap, d=20 mm with marking ring
085.116	Cap, d=30 mm with marking ring
085.117	Cap, d=10 mm
085.118	Cap, d=20 mm
085.119	Cap, d=30 mm
089.095	Freiburg Flap Applicator Set
189.701	Valencia Applicator Set

- Applicator provided with dosimetry and treatment caps.
- Applicator must be used with treatment cap in place.
- This applicator is also available as part of the Advanced Skin package # 103.118.
- The applicator set can be sterilized using steam sterilization and EtO.
- User manual 777.00237.

Freiburg Flap Applicator Set

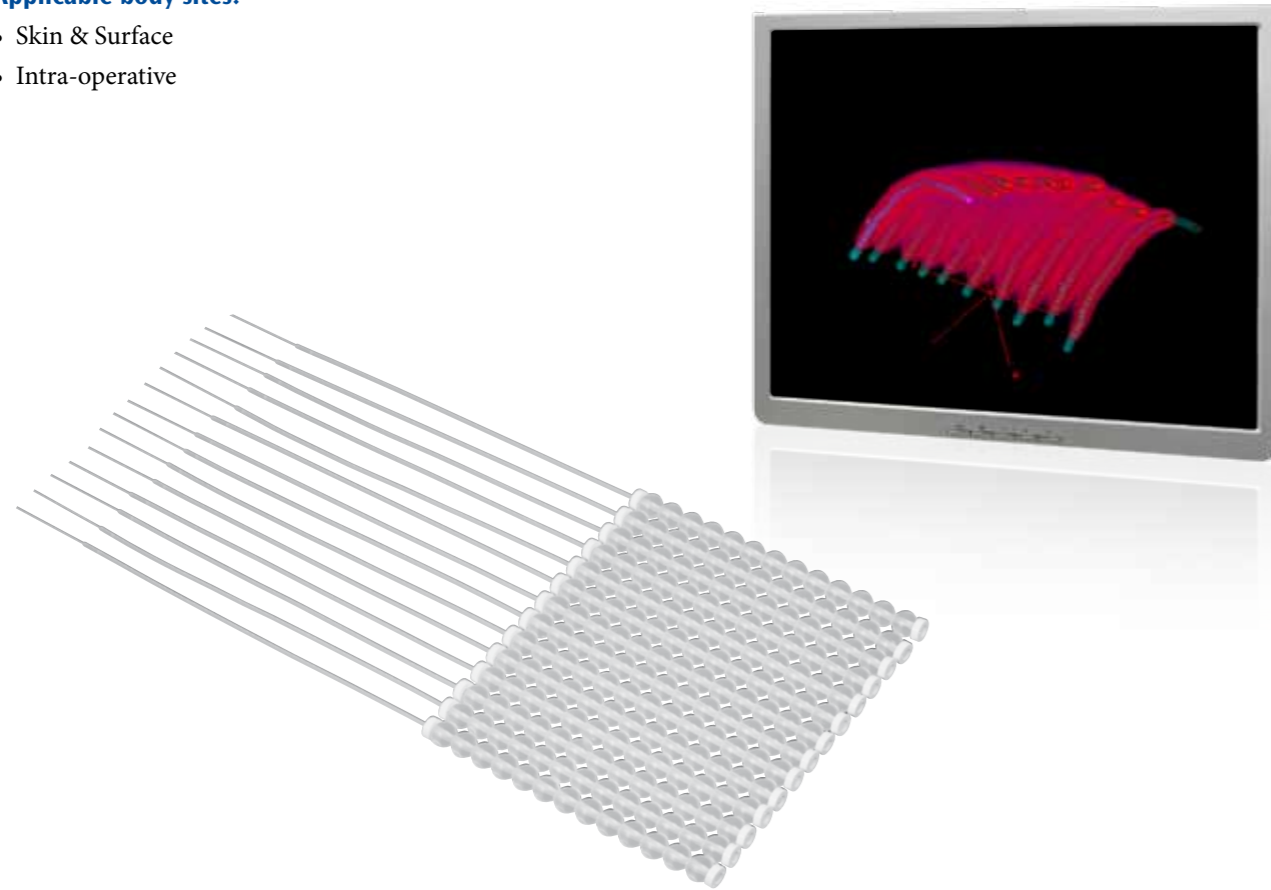
- Adaptable to any bodysite or organ surface
- Reproducible dosimetry

Applicable body sites:

- Skin & Surface
- Intra-operative



MR safe*



“The equidistance of the holes guarantees a precise separation of the catheters. The Freiburg Flap material allows a precise positioning in respect of the target and verification of the treatment area.”

Dr. S. Stange
Albert Ludwigs Universität, Freiburg, Germany

The Freiburg Flap is a flexible mesh style surface mold for skin or intra-operative surface treatments. It contains 36 channels for Flexible Implant Tubes. The mold can be easily adapted to any shape. It ensures a constant distance of the treatment catheter to the skin of 5 mm, for reproducible dosimetry. The mold provides an excellent alternative for orthovoltage or electron treatments.

* Please note that the obturators are not MR safe.

Order Information

Freiburg Flap Applicator Set, part # 089.095

Part Number	Description
592.976	Freiburg Flap
189.445	CT/MR Flexible Implant Tube 6F, single leader, 30 cm (6 pouches of 6 pcs)
189.367	Cutter, Flexible Implant Tubes
189.458	Radiolucent Button, white (72 pieces)

Advanced Skin Applicator Set, part # 103.118

Part Number	Description
085.041	Leipzig Applicator d=10 mm
085.042	Leipzig Applicator d=20 mm
085.043	Leipzig Applicator d=30 mm
085.114	Cap, d=10 mm with marking ring
085.115	Cap, d=20 mm with marking ring
085.116	Cap, d=30 mm with marking ring
085.117	Cap, d=10 mm
085.118	Cap, d=20 mm
085.119	Cap, d=30 mm
089.095	Freiburg Flap Applicator Set
189.701	Valencia Applicator Set

- Applicable for up to 28 days' implantation.
- Treatment channels are set 10 mm apart from each other, and have a length of 240 mm.
- The Flexible Implant Tubes and buttons come sterilized and are for single-use only.
- User manual 090.677.

Nasopharynx

Standard Nasopharyngeal Applicator Set	88
Rotterdam Nasopharyngeal Mold	90

Tongue

Pipard Tongue Template Set	92
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Alternative for Tongue brachytherapy

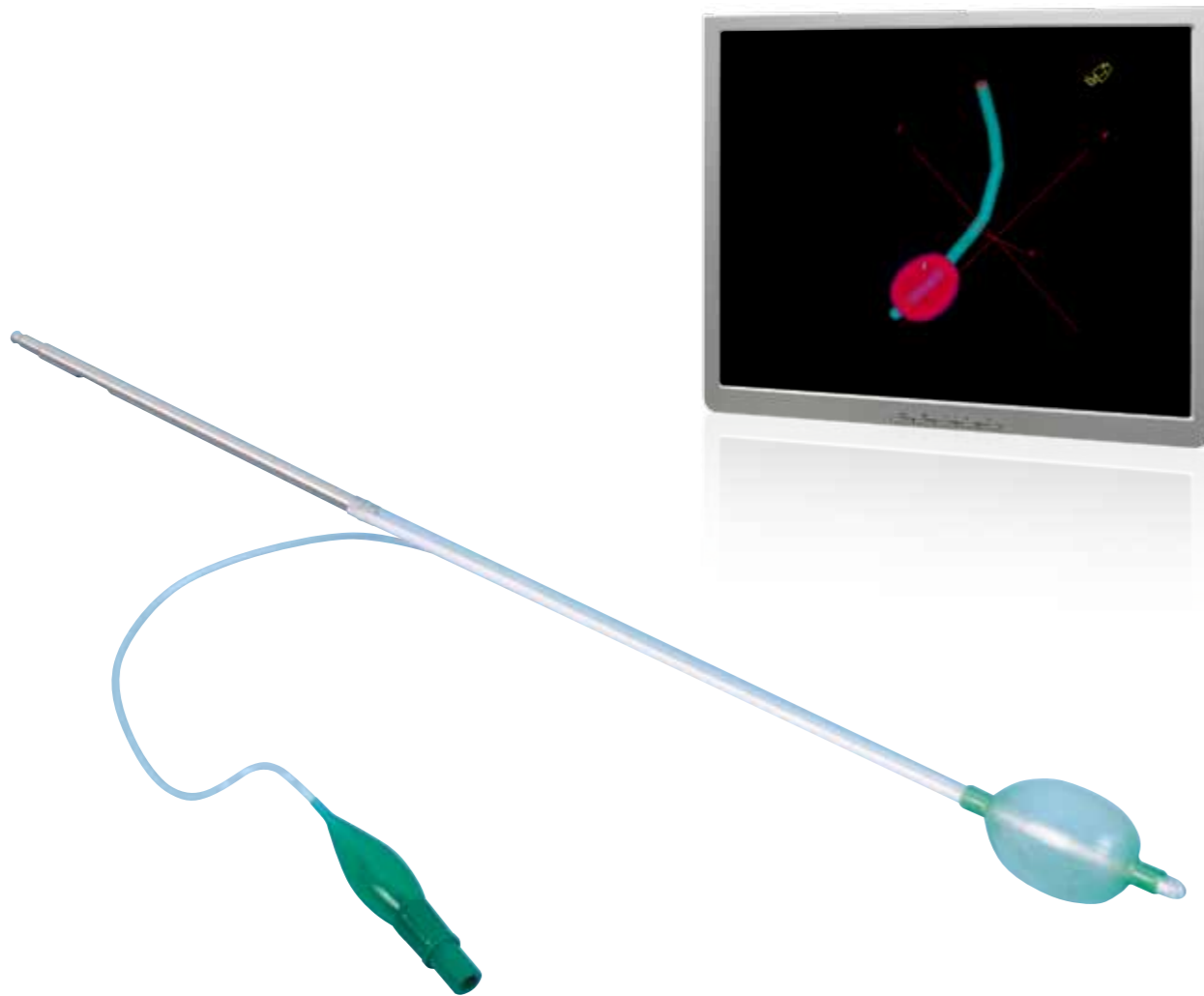
OncoSmart Catheter System	66
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Section

Breast	66
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Standard Nasopharyngeal Applicator Set

- Designed for easy placement without general anesthetic
- Balloon ensures immobilization and reduces surface dose



The Standard Nasopharyngeal Applicator is designed for treatment of the nasopharyngeal cavity. It contains an expandable balloon that is inflated after insertion into the nasopharyngeal cavity. This provides immobilization of the applicator and ensures optimal dose penetration, while reducing the surface dose. The balloon is easily inserted into the nasopharyngeal cavity without general anesthetic. It is designed for single use and can be expanded to a maximum of 30 mm.

Order Information

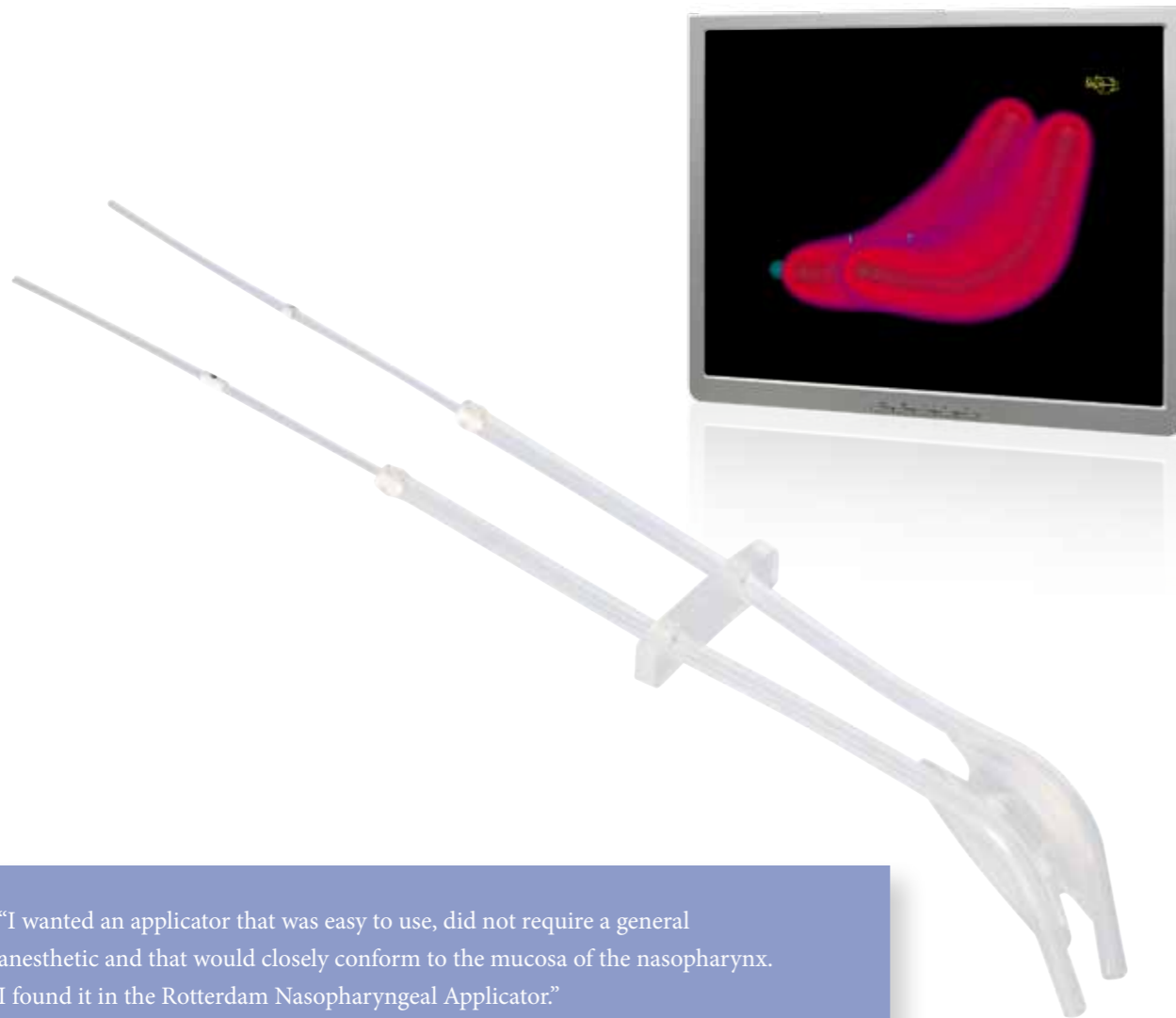
Complete Set, part # 085.065

Quantity	Part Number	Description
2	085.066	Standard Nasopharyngeal Applicator
5	085.067	Nasopharyngeal Balloon
1	084.158	Sterilizing Caps, 3.2 mm

- The balloon does not come sterilized and is for single use only.
- The applicator can be sterilized using steam sterilization or EtO (085.067 only with EtO).
- User manual 090.630.

Rotterdam Nasopharyngeal Mold

- Easily conforms to a range of nasopharyngeal cavity sizes
- Dual channel design for optimized dose distribution
- Catheters can be easily replaced for multiple fractions



“I wanted an applicator that was easy to use, did not require a general anesthetic and that would closely conform to the mucosa of the nasopharynx. I found it in the Rotterdam Nasopharyngeal Applicator.”

Prof. Dr. P. Levendag
Daniel den Hoed Clinic, Rotterdam, the Netherlands

The Rotterdam Nasopharyngeal Mold is made of a flexible silicone that easily conforms to the nasopharyngeal cavity. It consists of two channels on the upper surface to optimize the dose distribution and reduce the surface dose. The mold can remain in place for fractionated treatment, and the treatment catheters can be removed in between fractions.

Order Information

Complete Set, part # 089.068

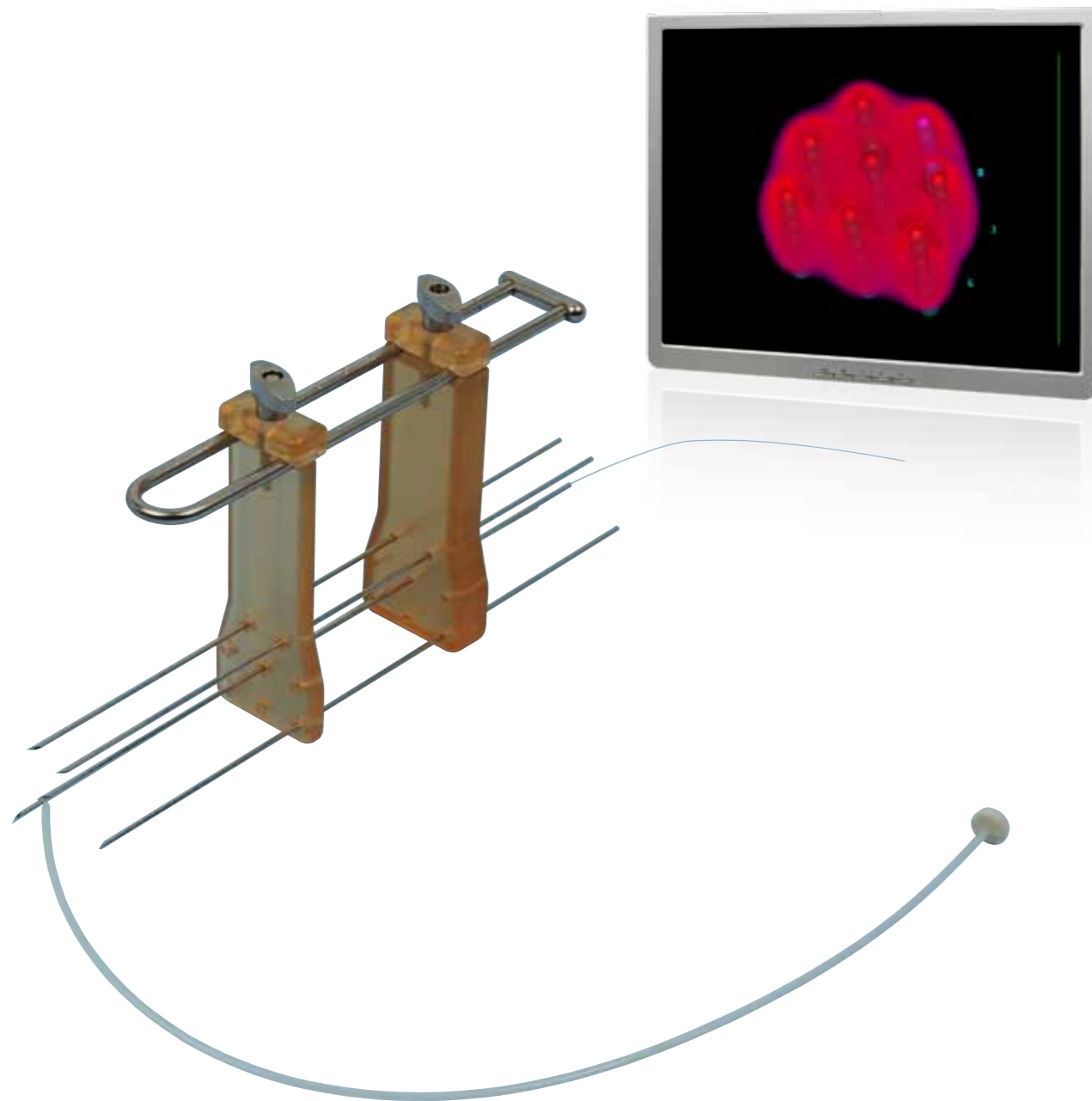
Quantity	Part Number	Description
5	089.062	Nasopharyngeal Mold Applicator
5	089.061	Nasopharyngeal Catheter Set
1	089.421	X-Ray Catheter no. 1; 30 cm
1	089.422	X-Ray Catheter no. 2; 30 cm
1	594.588*	K-Y Lubricating Gel; Tube 82 gr

* When ordered separately the minimum order quantity is 10 pieces.

- The mold applicator and catheter set do not come sterilized and are for single use only.
- The applicator parts can be processed using steam sterilization; the nasopharyngeal catheters using EtO.
- User manual 090.678.

Pipard Tongue Template Set

- Reproducible dosimetry
- Guidance during needle/implant Tube placement
- Immobilization during treatment



The Pipard Tongue Template Set is designed for accurate placement of needles and Flexible Implant Tubes in the base of the tongue. A variety of template configurations provides the option of dose optimization to the area of interest, while a reproducible dosimetry can be achieved. The template set can be used for the looping implantation technique by using double leader Flexible Implant Tubes.

Order Information

Complete Set, part # 045.410

Quantity	Part Number	Description
1	045.435	Adjustable Tongue Template holder
1	045.432	Tongue Template, 8 holes, 1.5 mm
1	045.433	Tongue Template, 10 holes, 1.5 mm
10	089.700	Leader Insertion Needle, 1.5 x 120 mm

Accessories

Part Number	Description
089.701	Leader Insertion Needle, 1.5 x 160 mm
089.702	Leader Insertion Needle, 1.5 x 200 mm
various*	Flexible Implant Tubes
various*	OncoSmart Catheter System

* See relevant pages in this guide.

- The applicator can be sterilized using steam sterilization or EtO.
- User manual 090.641.

Bile Duct

Arnhem Bile Duct Applicator

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Alternative for Pancreas brachytherapy

Arnhem Bile Duct Applicator

Section

Pancreas & Bile Duct

96

Alternative for Bile Duct brachytherapy

Lumencath Applicator Set

Bronchus & Esophagus

52

Arnhem Bile Duct Applicator

- Available in different lengths and can be placed within a drainage tube
- Provided with an extra outer layer to reduce the surface dose

Applicable body sites:

- Pancreas
- Intraluminal



The Arnhem Bile Duct Applicator is intended for the treatment of carcinoma of the bile duct. It is placed directly within the drainage tube. It features an additional outer layer to reduce the surface dose. It is also suitable for other intraluminal treatments.

Order Information

Part Number	Description
085.001	Arnhem Bile Duct Applicator, d=3,2 mm,100 cm

- The applicator set connects directly to the afterloader. No separate transfer tube is required.
- This applicator set can only be used with microSelectron afterloaders.
- The applicator can be sterilized using EtO sterilization.
- User manual 090.638.

Metal Interstitial Needles

Metal Interstitial Needles 102

Plastic Interstitial Needles

ProGuide Needles & Markers 100

Flexible Implant Tubes

Flexible Implant Tubes 106

CT/MR Flexible Implant Tubes 106

Accessories for Flexible implants

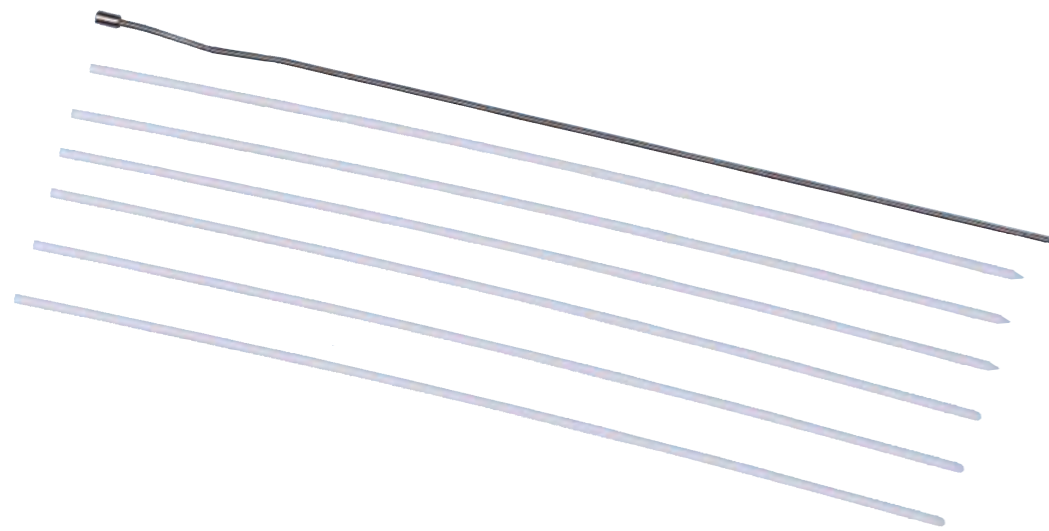
Emergency Button Cutter 107

Kink Protection Tubes 107

Push Fit Disconnection Tool 107

ProGuide Needles & Markers

- Flexibility in use
- Compatible with state-of-the-art imaging modalities



The range of OncoSmart ProGuide needles has been designed for interstitial applications in combination with image-based planning protocols using for instance CT and MR imaging. They are made from a high-quality plastic and are specifically developed for use with Nucletron afterloaders. ProGuide needles are available with either a sharp tip to enable easy penetration of the skin surface, or with a round tip for maximum patient safety during treatment. Rigidity of the plastic ProGuide needle is created by placing an obturator inside the needle during insertion. ProGuide needles come sterilized, to simplify the workflow in the clinic.

The OncoSmart ProGuide CT-Markers are designed to indicate the first source positions on CT-images of ProGuide interstitial needle implants. The markers fit needle diameters from 4F to 6F and are kept in place during imaging by means of a built-in locking mechanism. The markers are reusable and can be autoclaved. Each marker length has a unique color-coded knob.

* Please note that the obturators are not MR safe.

Order Information

ProGuide Needle Sets, 5F, Sharp

Part Number	Description
189.604	ProGuide Needle Set, 5F, sharp, L=240 mm, 18 needles (set contains 3 pouches of 6 needles each, and 6 Obturators)
189.619	ProGuide Needle Bulk Set, 5F, sharp, L=240 mm, 55 needles (set contains 8 pouches of 6 needles each, and 7 pouches with single-packed needles)

ProGuide Needle Sets, 6F, Sharp

Part Number	Description
189.602	ProGuide Needle Set, 6F, sharp, L=200 mm, 18 needles (set contains 3 pouches of 6 needles each, and 6 Obturators)
189.601	ProGuide Needle Set, 6F, sharp, L=240 mm, 18 needles (set contains 3 pouches of 6 needles each, and 6 Obturators)
110.231	ProGuide Needle Set, 6F, sharp, L=294 mm, 5 needles (set contains 5 pouches with single-packed needles)
189.617	ProGuide Needle Bulk Set, 6F, sharp, L=200 mm, 55 needles (set contains 8 pouches of 6 needles each, and 7 pouches with single-packed needles)
189.616	ProGuide Needle Bulk Set, 6F, sharp, L=240 mm, 55 needles (set contains 8 pouches of 6 needles each, and 7 pouches with single-packed needles)

ProGuide Needle Sets, 6F, Round

Part Number	Description
189.608	ProGuide Needle Set, 6F, round, L=200 mm, 18 needles (set contains 3 pouches of 6 needles each, and 6 Obturators)
189.607	ProGuide Needle Set, 6F, round, L=240 mm, 18 needles (set contains 3 pouches of 6 needles each, and 6 Obturators)
110.230	ProGuide Needle Set, 6F, round, L=294 mm, 5 needles (set contains 5 pouches with single-packed needles)
189.623	ProGuide Needle Bulk Set, 6F, round, L=200 mm, 55 needles (set contains 8 pouches of 6 needles each, and 7 pouches with single-packed needles)
189.622	ProGuide Needle Bulk Set, 6F, round, L=240 mm, 55 needles (set contains 8 pouches of 6 needles each, and 7 pouches with single-packed needles)

Obturators for ProGuide Needles

Part Number	Description
189.631	Obturator Bulk Set, for needles 5F and L=240 mm, 12 Obturators
189.629	Obturator Bulk Set, for needles 6F and L=200 mm, 12 Obturators
189.628	Obturator Bulk Set, for needles 6F and L=240 mm, 12 Obturators

OncoSmart ProGuide CT-Marker Sets (channel 1-18)

Part Number	Description
189.034	CT-Marker Set 200 mm, Metal
189.036	CT-Marker Set 240 mm, Black
189.039	CT-Marker Set 294 mm, Yellow

OncoSmart ProGuide CT-Marker Sets (channel 19-30)

Part Number	Description
189.691	CT-Marker Set 200 mm, Metal
189.692	CT-Marker Set 240 mm, Black
189.693	CT-Marker Set 294 mm, Yellow

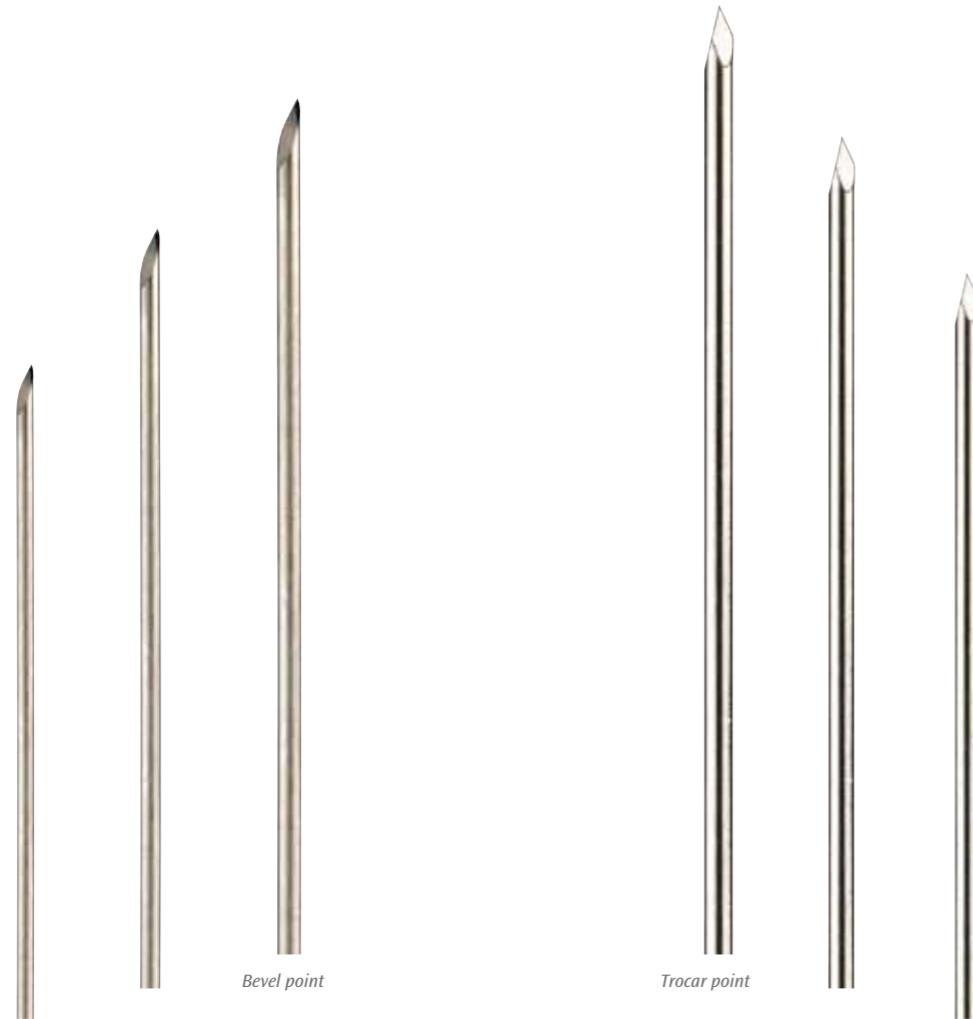
OncoSmart ProGuide CT-Marker Sets (channel 1-6)

Part Number	Description
110.285	CT-Marker Set 200, Metal
110.286	CT-Marker Set 240, Black
110.287	CT-Marker Set 294, Yellow

- ProGuide needles come sterilized, and are for single use only.
- Obturators must be placed in the ProGuide needle prior to insertion for stability and to avoid needle damage. Obturators do not come sterilized and can be processed using steam sterilization or EtO.
- Kink protection tubes are available for use with ProGuide needles.
- User manual 090.695.

Metal Interstitial Needles

- Designed for optimal needle rigidity and sharpness during interstitial treatments
- Needle tip available in various geometries to adapt to clinical needs



Interstitial needles are used for treatment of carcinoma where no lumen or cavity is available, or where additional and very precise target area coverage is required. These metal needles are designed to maintain their rigidity and sharpness throughout multiple treatments, in combination with the appropriate Nucletron templates. Interstitial needles are available in stainless steel or titanium, with a needle tip that is either round, bevel or trocar shaped. The round tip is designed to minimize tissue damage and optimize ease in implantation. The trocar and bevel tip facilitate insertion in the tissue. Obturators can be placed inside the needle during insertion to create additional rigidity.

Interstitial needles are directly connected to the transfer tube of the Nucletron afterloader. Their material makes the interstitial needles ideal for use in combination with image guidance of the treatment. The titanium interstitial needles are specifically designed for use with CT and MR-based imaging for volume and target delineation, designed to minimize artifacts on the acquired image sets.

Order Information Titanium Needle Sets

Trocar Point Needles

Part Number	Description
110.020	Trocar Point Titanium Needle Set, 1.9 mmx200 mm (Set of 5 needles)
110.021	Trocar Point Titanium Needle Set, 1.9 mmx240 mm (Set of 5 needles)

Round Point Needles

Part Number	Description
110.022	Round Point Titanium Needle Set, 1.9 mmx200 mm (Set of 5 needles)
110.023	Round Point Titanium Needle Set, 1.9 mmx240 mm (Set of 5 needles)

Accessories

Part Number	Description
083.252	Obturator, l=100 mm*
089.636	Handle for Obturator
189.996	Titanium Needle Stopper Set
045.004	Torque Screwdriver for Needle Stopper
083.147	Sterilizing Caps, 1.9 mm (50 pieces)

* Minimum order quantity is 10 pieces.

- Needles are described by their outside diameter and length.
- Needles should be inspected prior to use. Any needle that is blunt, corroded or bent should not be used.
- Metal needles can be sterilized using steam sterilization and EtO.
- User manual 090.719.

Order Information Stainless Steel Needle Sets

Interstitial Needle Basic Set 1.5 mm, part # 083.900

Quantity	Part Number	Description
20*	083.914	Trocar Needle 1.5 mm x 80 mm
20*	083.916	Trocar Needle 1.5 mm x 100 mm
20*	083.918	Trocar Needle 1.5 mm x 120 mm
20*	083.920	Trocar Needle, 1.5 mm x 140 mm
20*	083.922	Trocar Needle 1.5 mm x 160 mm
20*	083.924	Trocar Needle 1.5 mm x 180 mm
20*	083.926	Trocar Needle, 1.5 mm x 200 mm
20*	089.001	Obturator for 1.5 mm Needle x 80 mm
20*	089.003	Obturator for 1.5 mm Needle x 100 mm
20*	089.005	Obturator for 1.5 mm Needle x 120 mm
20*	089.007	Obturator for 1.5 mm Needle x 140 mm
20*	089.009	Obturator for 1.5 mm Needle x 160 mm
20*	089.011	Obturator for 1.5 mm Needle x 180 mm
20*	089.013	Obturator for 1.5 mm Needle x 200 mm
1	045.004	Torque Screwdriver, 1.27 mm
40*	089.025	Needle stopper 1.5 mm
1	083.905	Sterilization Box

* When ordered separately the minimum order quantity is 10 pieces.

Accessories

Part Number	Description
083.147	Sterilizing Caps, 1.9 mm (50 pcs)

* When ordered separately the minimum order quantity is 100 pieces.

Interstitial Needle Basic Set 1.9 mm, part # 083.040

Quantity	Part Number	Description
20*	083.050	Trocar Needle, 1.9 mm x 80 mm
20*	083.052	Trocar Needle, 1.9 mm x 100 mm
20*	083.054	Trocar Needle, 1.9 mm x 120 mm
20*	083.056	Trocar Needle, 1.9 mm x 140 mm
20*	083.058	Trocar Needle, 1.9 mm x 160 mm
20*	083.060	Trocar Needle, 1.9 mm x 180 mm
20*	083.062	Trocar Needle, 1.9 mm x 200 mm
20*	083.250	Obturator for 1.9 mm Needle x 80 mm
20*	083.252	Obturator for 1.9 mm Needle x 100 mm
20*	083.254	Obturator for 1.9 mm Needle x 120 mm
20*	083.256	Obturator for 1.9 mm Needle x 140 mm
20*	083.258	Obturator for 1.9 mm Needle x 160 mm
20*	083.260	Obturator for 1.9 mm Needle x 180 mm
20*	083.262	Obturator for 1.9 mm Needle x 200 mm
40*	083.001	Stainless Steel Stopper, 1.9 mm Needle
1	045.004	Torque Screwdriver, 1.27 mm
1	594.127	Lid for Sterilization Box
1	083.447	Sterilization Box

* When ordered separately the minimum order quantity is 10 pieces.

- Needles are described by their outside diameter and length.
- \varnothing 1.3 mm needles can only be used with microSelectron.
- Needles should be inspected prior to use. Any needle that is blunt, corroded or bent should be discarded.
- Metal needles can be sterilized using steam sterilization and EtO.
- User manual 090.619.

Order Information Stainless Steel Needle Sets, Trocar or Bevel Point

Trocar Point Needle Set, 1.3 mm \varnothing

Quantity	Part Number	Description
10*	110.109	Trocar Needle, 1.3 mm x 120 mm
10*	110.113	Trocar Needle, 1.3 mm x 160 mm
10*	110.117	Trocar Needle, 1.3 mm x 200 mm

* When ordered separately the minimum order quantity is 10 pieces.

Trocar Point Needle Set, 1.5 mm \varnothing

Quantity	Part Number	Description
10*	083.914	Trocar Needle, 1.5 mm x 80 mm
10*	083.916	Trocar Needle, 1.5 mm x 100 mm
10*	083.918	Trocar Needle, 1.5 mm x 120 mm
10*	083.920	Trocar Needle, 1.5 mm x 140 mm
10*	083.922	Trocar Needle, 1.5 mm x 160 mm
10*	083.924	Trocar Needle, 1.5 mm x 180 mm
10*	083.926	Trocar Needle, 1.5 mm x 200 mm

* When ordered separately the minimum order quantity is 10 pieces.

Trocar Point Needle Set, 1.9 mm \varnothing

Quantity	Part Number	Description
10*	083.050	Trocar Needle, 1.9 mm x 80 mm
10*	083.052	Trocar Needle, 1.9 mm x 100 mm
10*	083.054	Trocar Needle, 1.9 mm x 120 mm
10*	083.056	Trocar Needle, 1.9 mm x 140 mm
10*	083.058	Trocar Needle, 1.9 mm x 160 mm
10*	083.060	Trocar Needle, 1.9 mm x 180 mm
10*	083.062	Trocar Needle, 1.9 mm x 200 mm
10*	083.066	Trocar Needle, 1.9 mm x 240 mm
10*	083.072	Trocar Needle, 1.9 mm x 294 mm

* When ordered separately the minimum order quantity is 10 pieces.

Accessories

Part Number	Description
083.147	Sterilizing Caps, 1.9 mm (50 pieces)

- Needles are described by their outside diameter and length.
- Needles should be inspected prior to use. Any needle that is blunted, corroded, or bent should be discarded.
- Metal needles can be sterilized using steam sterilization and EtO.
- User manual 090.619.

Bevel Point Needles, 1.9 mm \varnothing

Part Number	Description
083.045*	Bevel Needle, 1.9 mm x 200 mm

* When ordered separately the minimum order quantity is 20 pieces.

Flexible Implant Tubes

The OncoSmart Flexible Implant Tubes are developed for treatments that require a moldable source path. The Flexible Implant Tubes are equipped with 'leaders' to run the implant tube through a channel in the tissue that is preformed by a leader insertion needle. The Flexible Implant Tubes are available in various configurations: single leader with button end; single leader with blind end, or double leader. They come sterilized and ready for immediate clinical use. To improve visibility of the Flexible Implant Tubes in combination with state of the art CT and MR imaging modalities, dedicated CT/MR Flexible Implant Sets and buttons are available.



Flexible Implant Tube Set, 6F, 30 cm, part # 189.400*

Quantity	Part Number	Description
2	189.300	Flexible Implant Tube, 6F, Single leader, 30 cm (box of 36)
2	189.298	Flexible Implant Tube, 6F, Double leader, 30 cm (box of 36)
2	189.296	Flexible Implant Tube, 6F, Blind end, 30 cm (box of 36)
1	189.282	Radio-opaque Button white, 6F (box of 72)
1	189.284	Radio-opaque Button black, 6F (box of 72)
1	189.286	Radio-opaque Button red, 6F (box of 72)
1	189.288	Radio-opaque Button blue, 6F (box of 72)
1	189.290	Radio-opaque Button green, 6F (box of 72)
1	189.367	Cutter Flexible Implants
1	189.437	Leader Insertion needles, 1.5 x 200 mm, 72 needles (box of 72)

* Set contains non-CT/MR compatible parts.

CT/MR Flexible Implant Tube Set, 6F, 30 cm, part # 189.401

Quantity	Part Number	Description
2	189.445	CT/MR Flexible Implant Tube, 6F, Single leader, 30 cm (box of 36)
2	189.298	Flexible Implant Tube, 6F, Double leader, 30 cm (box of 36)
2	189.296	Flexible Implant Tube, 6F, Blind end, 30 cm (box of 36)
1	189.458	Radiolucent button white, 6F (box of 72)
1	189.460	Radiolucent button black, 6F (box of 72)
1	189.462	Radiolucent button red, 6F (box of 72)
1	189.464	Radiolucent button blue, 6F (box of 72)
1	189.466	Radiolucent button green, 6F (box of 72)
1	189.367	Cutter Flexible Implants
1	189.437	Leader insertion needle, 1.5 x 200 mm

- Flexible Implant Tubes come sterilized, and are for single use only.
- Flexible Implant Tubes are packed in pouches of 6, and with 6 pouches per box.
- Buttons are packed in pouches of 6, and with 12 pouches per box.
- For Flexitron afterloaders, only Flexible Implant Tubes with length ≤ 400 mm can be used.
- User manual 090.710.

* Please note that the insertion needles are not MR safe.

Accessories

Part Number	Description
189.445	CT/MR Flexible Implant Tube, 6F, Single leader, 30 cm (box of 36)
189.504**	Flexible Implant Tube, 6F, Single leader, 50 cm (box of 36)
189.502	Flexible Implant Tube, 6F, Double leader, 50 cm (box of 36)
189.500	Flexible Implant Tube, 6F, Blind end, 50 cm (box of 36)
189.510**	Flexible Implant Tube, 5F, Single leader, 30 cm (box of 36)
189.508	Flexible Implant Tube, 5F, Double leader, 30 cm (box of 36)
189.506	Flexible Implant Tube, 5F, Blind end, 30 cm (box of 36)
189.292**	Radio-opaque Button yellow, 6F (box of 72)
189.294**	Radio-opaque Button brown, 6F (box of 72)
189.472**	Radio-opaque Button white, 5F (box of 72)
189.474**	Radio-opaque Button black, 5F (box of 72)
189.476**	Radio-opaque Button red, 5F (box of 72)
189.478**	Radio-opaque Button blue, 5F (box of 72)
189.480**	Radio-opaque Button green, 5F (box of 72)
189.482**	Radio-opaque Button yellow, 5F (box of 72)
189.484**	Radio-opaque Button brown, 5F (box of 72)
045.103	S.s. Button, Henschke
045.046	Bevel Needle, Open End, 1.5 x 200 mm
089.021	Catheter Insertion Set, 6F Trocar
089.023	Catheter Insertion Set, 6F Bevel
594.456	Emergency Button Cutter
089.420	X-Ray Catheter Set, 30 cm (1-18)
030.100	Push Fit Disconnection Tool
089.348	Kink Protection Tube, for 6F Flexible*
089.345	Kink Protection Tube, for Transfer Tube*

* Minimum order quantity is 50 pieces.

** Button is not CT/MR compatible.

Accessories for Flexible Implants

Emergency Button Cutter

Emergency Button Cutter is designed to easily cut through the button of a Flexible Implant Tube in order to remove the catheter intact from the implant site.



Emergency Button Cutter

Part Number	Description
594.456	Emergency Button Cutter

Kink Protection Tubes

The Kink Protection Tubes are designed to fit over the Transfer Tube, ProGuide needle, or Flexible Implant Tube and button during and in between treatment fractions to reduce the risk of kinking.



Kink Protection Tubes

Part Number	Description
089.345*	Kink protection Tube, for transfer Tube
089.347*	Kink protection Tube, 5F
089.348*	Kink protection Tube, 6F

* Minimum order quantity is 50 pieces.

Push Fit Disconnection Tool

The Push Fit Disconnection Tool can be used for quick and easy disconnection of Implant Tubes or needles from the Transfer Tubes.



Push Fit Disconnection Tool

Part Number	Description
030.100*	Push Fit Disconnection Tool for microSelectron
137.099	Transfer Tube Unlock Tool for Flexitron

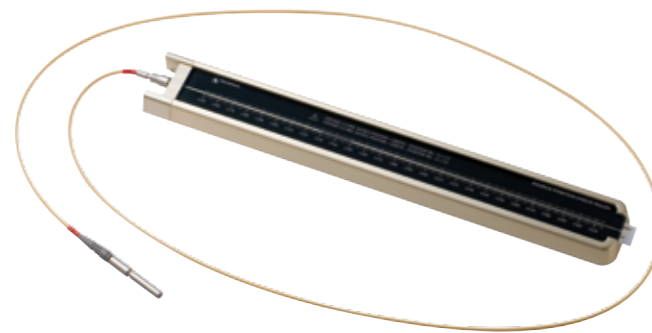
* Shown in picture.

Source Position Check Ruler	110
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CT/MR Applicator Clamp	111
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Source Position Check Ruler

The Source Position Check Ruler is designed for verification of the correct treatment position of the sources and check cable, and of the length of each of the transfer tubes. It can be used with either the mechanical indicator or GAFCHROMIC® filmstrip, a method that enables instant logging of the result of the measurement.

The Source Position Check Ruler has embedded markers that allow multiple measurements and serve as reference to validate correct positioning of the GAFCHROMIC® filmstrip. The films are transparent for easy digitizing or scanning, and are self-developing.



Order Information

For microSelectron

Part Number	Description
096.035	Source Position Check Ruler (including 2 GAFCHROMIC® filmstrips)

Accessories

Part Number	Description
096.271A10	GAFCHROMIC® filmstrip (box of 10)

For Flexitron

Part Number	Description
136.196	3- Channel Source Position Check Ruler

- It is recommended to store GAFCHROMIC® film in the dark until use.

Source Position Simulator

The Source Position Simulator is designed to determine the distal reference length of an applicator, and to determine the treatment area under fluoroscopy.

Part Number	Description
111.094*	Source Position Simulator *

* For use with microSelectron only

- Can be used with various imaging modalities
- Accurate applicator fixation
- Easy to use



MR conditional

The CT/MR Applicator Clamp is designed for fixation of applicators to a patient treatment table or patient bed. It is compatible with use of CT and MR imaging. With one knob all variables such as length, rotation, sloping and angle of the inserted applicator can be fixed. For fixation of the applicator itself, various inserts are provided that allow fitting all available Nucletron applicators within the clamp. The entire assembly requires no oil, and can easily be taken apart for cleaning purposes. The CT/MR Applicator Clamp can be attached to a base plate for immobilization in any hospital bed or the clamp can be mounted on an axle in order to attach the clamp to for example a hospital bed IBU table etc.



CT/MR Applicator Clamp with base plate, # 189.932

Quantity	Part Number	Description
1	189.933	Fixation Part
1	189.934	Base plate
4	189.968	Inserts Ø 3 mm (titanium coloured)
4	189.950	Inserts Ø 6 mm (white coloured)
4	189.969	Inserts Ø 12 mm (black coloured)

Accessories

Part Number	Description
189.981	Set of 4 inserts Ø 3 mm (titanium colored)
189.980	Set of 4 inserts Ø 6 mm (white colored)
189.982	Set of 4 inserts Ø 12 mm (black colored)
189.952	Spare Applicator Fixation Knob (small)
189.959	Spare Clamp Fixation Knob (large)

CT/MR Applicator Clamp with Axle, # 189.931

Quantity	Part Number	Description
1	189.933	Fixation Part
1	189.935	Axle
4	189.968	Inserts Ø 3 mm (titanium coloured)
4	189.950	Inserts Ø 6 mm (white coloured)
4	189.969	Inserts Ø 12 mm (black coloured)

- The baseplate is X-Ray translucent.
- All clamp components can be sterilized using steam sterilization.

Patient Belt Coupling (PBC)*

Patient Belt Coupling Sets, featuring the Quick Release Coupling device, are designed to support a user-friendly fixation of transfer tubes and applicator components. The Quick Release Coupling enables a patient to be connected and disconnected from the afterloader in a quick and easy way. Dedicated transfer tubes are connected to separate parts of the Quick Release Coupling and similarly to the patient and the afterloader. The patient connector part of the Quick Release Coupling is fixed in position using a patient belt. With all transfer tubes in place on the patient and on the afterloader side, the separate parts of the Quick Release Coupling are connected or disconnected by a one simple twist. Complete Patient Belt Coupling Sets for various types of applicators are available.

PBC Set for Needles and Flexibles, part # 111.379

Part Number	Description
030.299	Patient Waist Belt Set
111.440	Coupling Transfer Tube Set for Needles (1-18)
111.480	Coupling Transfer Tube Set 6F Flexibles (1-18)
079.087	Quick Release Coupling Set
111.420	Coupling Transfer Tube Set

PBC Set for Gynecologic Applicators, part # 111.380

Part Number	Description
032.345	Patient Leg Belt Set
111.421	Coupling Transfer Tube no. 1
111.422	Coupling Transfer Tube no. 2
111.423	Coupling Transfer Tube no. 3
079.087	Quick Release Coupling Set
111.381	Gyn.Transfer Tube, ch 1
111.382	Gyn.Transfer Tube, ch 2
111.383	Gyn.Transfer Tube, ch 3

PBC Set for Flexible Implant Tubes, part # 111.385

Quantity	Part Number	Description
1	030.299	Patient Waist Belt Set
1	111.480	Coupling Transfer Tube Set 6F Flexibles (1-18)
1	079.087	Quick Release Coupling Set
1	111.420	Coupling Transfer Tube Set

PBC Set for Interstitial Needles, part # 111.386

Part Number	Description
030.299	Patient Waist Belt Set
111.440	Coupling Transfer Tube Set for Needles (1-18)
079.087	Quick Release Coupling Set
111.420	Coupling Transfer Tube Set

Accessories for PBC Sets

Part Number	Description
030.100	Push Fit Disconnection tool*
111.381	GYN PBC transfer Tube keyed for channel 1
111.382	GYN PBC transfer Tube keyed for channel 2
111.383	GYN PBC transfer Tube keyed for channel 3
111.384	GYN PBC transfer Tube keyed for channel 4
079.087	Quick release coupling Set

* for use with Flexible Implant Tubes only.

Coupling Transfer Tube Sets

Part Number	Description
111.420	Coupling Transfer Tube Set (channel 1-18)
111.520	Coupling Transfer Tube Set (channel 19-30)
111.440	Coupling Transfer Tube Set for Needles (channel 1-18)
111.535	Coupling Transfer Tube Set for Needles (channel 19-30)
111.500	Coupling Transfer Tube Set for 4F Flexible Implant Tubes (channel 1-18)
111.580	Coupling Transfer Tube Set for 4F Flexible Implant Tubes (channel 19-30)
111.460	Coupling Transfer Tube Set for 5F Flexible Implant Tubes (channel 1-18)
111.550	Coupling Transfer Tube Set for 5F Flexible Implant Tubes (channel 19-30)
111.480	Coupling Transfer Tube Set for 6F Flexible Implant Tubes (channel 1-18)

* Available only for use with microSelectron afterloader.

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Committed to Brachytherapy

Nucletron, an Elekta company, is the world-leader in state-of-the-art brachytherapy solutions for cancer treatment. With 35 years of experience, we are the preferred partner for brachytherapy in more than 1,500 institutions worldwide. We continue our commitment with more than 500 employees dedicated to brachytherapy, a global presence in more than 100 countries and an ongoing investment in innovation.

A human care company, Elekta pioneers significant innovations and clinical solutions for treating cancer and brain disorders. Elekta provides intelligent and resource-efficient technologies that improve, prolong and save patient lives. We go beyond collaboration seeking long-term relationships built on trust with a shared vision, offering confidence to healthcare providers and their patients.

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