Axxent Vaginal Applicator Set – Specifications	Part Number
Available Diameter/Length	
Vaginal Applicator Set: *(Includes 4 applicators, source channels and carrying case)*	AG3000
Vaginal Applicator – diameter 20 mm, length 102 mm	AG3020
Vaginal Applicator – diameter 25 mm, length 103 mm	AG3025
Vaginal Applicator – diameter 30 mm, length 106 mm	AG3030
Vaginal Applicator – diameter 35 mm, length 107 mm	AG3035
Source Channel – length 15.9 cm	E1000

Axxent Balloon Applicator–BR Specifications	Part Number
Available Diameter/Volume	
• 3-4 cm Spherical Balloon Applicator/30-45 cc	AB2034
• 4-5 cm Spherical Balloon Applicator/45-75 cc	AB2045
• 5-6 cm Spherical Balloon Applicator/65-130 cc	AB2056
• 5x7 cm Ellipsoidal Balloon Applicator/90-125 cc *(Available at a later date)*	AB2057E
• 6x7 cm Ellipsoidal Balloon Applicator/120-160 cc *(Available at a later date)*	AB2067E
Multi-Lumens • Seroma Drainage Lumens • Balloon Inflation Lumen • 50 Kv X-ray Source Insertion	
Markings • 1 cm intervals along shaft	

Axxent Controller Specifications		Part Number
Axxent Controller		XP1100
High Voltage Output	50 kV (selectable)	
Beam Current	300 µA	
Dimensions		
Height	52 in (133 cm)	
Width	21 in (53 cm)	
Depth	31 in (79 cm)	
Weight	202 lb (92 kg)	
Maximum Inclination	10 degrees	
Power Specifications		
Line Power	100-120V~, 220-240 V~, 150 VA	
Ion Calibration Chamber		
Manufacturer/Model	Standard Imaging/HDR 1000 Plus	
Electrometer		
Manufacturer/Model	Standard Imaging/Max 4000	

Axxent HDR X-ray Source 2.2 Specifications		Part Number
Axxent HDR X-ray Source		S7500
X-ray Tube Diameter	2.25 mm	
Assembly Length	250 mm	
Assembly Diameter	5.4 mm	
X-ray Source Power	15 watts	
Typical Treatment Time	10 min	
Maximum Number of Treatments per X-ray Source	10	
Source Includes • Integral water cooling sheath • Low-force high-voltage connector • Flexible high-voltage cable		
Nominal Dose Rate	0.6 Gy/min @ 3 cm in water	

About Xoft

Xoft, Inc. is a privately-held medical device company developing and commercializing revolutionary miniaturized electronic brachytherapy technology. The Company is dedicated to improving patients' lives by providing high quality, innovative, safe and effective medical products for use in radiation oncology applications.

To order by phone: 877-963-8327

Xoft, Inc.
345 Potrero Avenue Sunnyvale, CA 94085
408.419.2300 • Fax 866.222.3404
www.xoftinc.com

[1] American Cancer Society, Cancer Facts & Figures 2008

[2] Benitez P, Keish, M, Vicini F, Stolier A, Scroggins T, Walker, A, White J, et al. "Five-year results: the initial clinical trial of Mammosite balloon brachytherapy for partial breast irradiation in early-stage breast cancer," American Journal of Surgery 194 (2007) 456-462

[3] Benitez P, Chen P, Vicini F, Wallace M, Kestin L, Edmundson G, et al. Partial breast irradiation in breast-conserving therapy by way of interstitial brachytherapy American Journal of Surgery 188 (2004) 355-364

[4] Dickler, A, Kirk, M, Seif, N, Griem, K, Dowlatshahi, K, Francescatti, D, Abrams, A, "A dosimetric comparison of MammoSite high-dose-rate brachytherapy and Xoft Axxent electronic brachytherapy." *Brachytherapy*, Volume 6, Issue 2, April-June 2007, 164-168

MS-0014 Rev. D 7/08

Axxent®
Electronic Brachytherapy System

Axxess with Axxent

Innovative technology for the practice of radiation oncology






Xoft®

Axxent *Electronic Brachytherapy System®*

Axxent Controller

Platform Technology

The Axxent Electronic Brachytherapy System is a leading-edge technology that utilizes a proprietary miniaturized X-ray source to apply radiation directly to a tumor bed within the body. The Axxent System may be used for accelerated partial breast irradiation in the treatment of early-stage breast cancer and for irradiation in endometrial cancer treatment.

The Axxent X-ray Source mimics certain characteristics of the most common HDR brachytherapy isotope ^{192}Ir. The unique combination of high dose rate and low energy radiation offered by the Axxent HDR X-ray Source enables the procedure to be done under the supervision of a radiation oncologist in a minimally shielded setting. This allows providers and patients increased access to brachytherapy treatment.

The Axxent Electronic Brachytherapy System will allow for easy incorporation of additional applications.

Miniaturized X-ray source, shown actual size

Advanced Technology

An estimated 250,230[1] women in the U.S. alone will be diagnosed with breast cancer in 2008. Because most of these women have their breast cancer detected at an early localized stage, they can be offered the choice of Breast Conserving Therapy over mastectomy. Recent data[2,3] has shown promising results with new radiation techniques that make it easier for patients to comply with their radiation therapy requirements after lumpectomy surgery.

Additionally, an estimated 38,897[1] women in the U.S. will be diagnosed with endometrial cancer in 2008.

The Axxent System by Xoft, Inc., offers an advanced radiation treatment option that is easier, faster, and more accessible to patients and providers than many other currently available choices:

- No radioactive isotopes
- Potentially minimizes exposure to healthy tissue
- Minimal room shielding requirements
- Low barrier to entry
- On/off capability for enhanced radiation safety

Clinical Evidence

The Axxent System provides a therapeutic dose to radiation directly to the region at risk. The relatively lower energy radiation minimizes exposure to surrounding healthy tissue beyond the prescription point[4].

Comparative Treatment Volume Doses to Breast Tissue

Treatment Volume Dose			
	Dickler et al[1]	Dickler et al[1]	Smitt, Kirby[2]
	Balloon Applicator with ^{192}Ir Seed **Stepped**	Axxent 50kV X-ray **Stepped**	Axxent 50kV X-ray **Stepped**
PTV (cc)			98-123
PTV Coverage (% V100)	96.5%	96.5%	90.0%
V100 (cc)	83.6	83.6	89-112
V150 (cc)	36.2	51.4	45-51
V200 (cc)	9.8	27.7	19-22
Ipsilateral Breast V50 (17 Gy)[1]	19.8%	13.0%	P<0.05
Ipsilateral Lung V30 (10.2 Gy)[1]	3.7%	1.1%	
Heart V5 (0.17 Gy)[1]	59.2%	9.4%	

[1] Dickler et al, A Dosimetric Comparison of MammoSite HDR Brachytherapy and Axxent Electronic Brachytherapy, Brachytherapy 6 (2007) 164-168.
[2] Smitt & Kirby, Dose-volume characteristics of a 50Kv source for intracavitary accelerated partial breast irradiation. Brachytherapy 6 (2007) 207-211.

Product Overview

Axxent HDR X-ray Source

Axxent Balloon Applicator

Axxent FlexiShield

Vaginal Applicator Set

Clamp and Base Plate