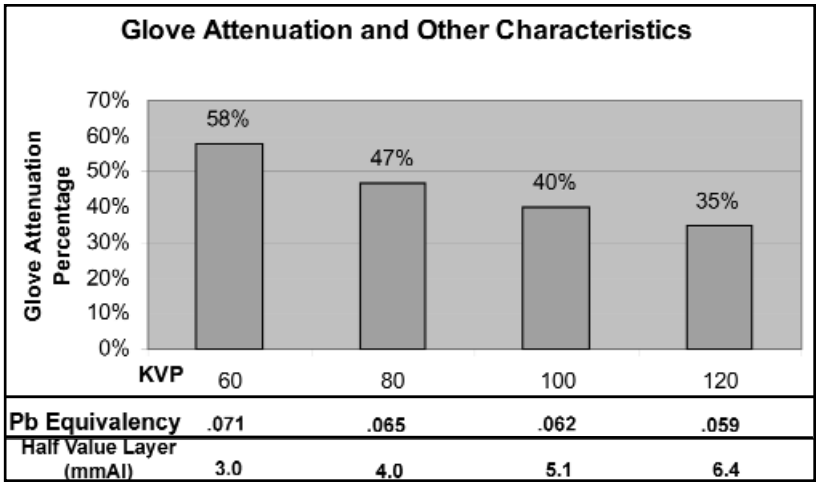
STERILE ATTENUATING GLOVES

Fluoroscopic Protection and Touch Sensitivity



Test Method: ASTM F2547-06

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Thickness:
Only 9 mils in thickness, Attenuating Gloves offer excellent flexibility, dexterity, and touch sensitivity. The thickness of the Attenuating Glove also helps reduce finger fatigue.

Lead-Free, Synthetic Rubber Composition:
Our synthetic rubber formulation avoids the proteinaceous sensitivities associated with natural latex. The lead-free composition of Attenuating Gloves eliminates EPA heavy-metal toxicity disposal concerns**.**

Sterile:
Each pair of Attenuating Gloves comes in a sterile package.

Item #	Description	Size
906-800	Attenuating Gloves	6 1/2
906-801	Attenuating Gloves	7
906-802	Attenuating Gloves	7 1/2
906-803	Attenuating Gloves	8
906-804	Attenuating Gloves	8 1/2
906-805	Attenuating Gloves	XL

SEED LOADING VACUUM TWEEZERS KIT

The Seed Loading Vacuum Tweezers Kit consists of a compact vacuum pump with a line switch, 5 feet of clear tubing, a vacuum line filter, a quick disconnect assembly, a vacuum pen and a 19 Ga. x 24 cm long vacuum needle (with a 130° bend).

Optional Accessories:
- Remote Foot Switch
- Vacuum Needle 19 Ga. x 24 cm L

Specifications

Vacuum: 14 Hg
Air Flow: 125 in³/min
Power: 115 VAC., 60 Hz, 2 Watts
Foot Switch Power: 125 VAC, 7 Amps

Item #	Description
906-001	Seed Loading Vacuum Kit (115 Vac)
906-002	Optional: Remote Foot Switch
162-000-01	Vacuum Pump, 115 Volts
162-000-04	Vacuum Line Filter Complete
906-008	5' Long Vacuum Hose
906-012	Quick Disconnect for Vacuum Hose
906-014	Vacuum Pen with Insulators
906-020	Optional: Vacuum Needle 19 Ga. x 24 cm Long
906-022	Vacuum Needle 19 Ga. x 24 cm Long w/ 130° Bend
455-050	50 S.S. Makers - 0.8 mm Dia. x 5 mm L (used for practice)

SEEDVAC™

For rapid loading of seeds and spacers into implant needles

Features and Benefits

- Fast loading, 25 needles in about five minutes
- Minimal radiation exposure, maximum distance from seeds
- Works like a vacuum tweezers

The SeedVac™ is a vacuum driven device designed to pull prostate implant seeds and spacers into a clear tube tip by placing a finger over a hole on the hand piece to create the vacuum. The prescribed sequence of seeds and spacers is visually verified in the clear tube tip before being placed into the needle. These seeds and spacers are then placed into an implant needle simply by lifting your finger off the hole. A circular brass shield near the end of the hand piece provides radiation protection to the hand during the loading procedure.

The SeedVac™ Needle Loading System is composed of three pieces: **1.** A vacuum pump. **2.** A brass hand piece including autoclavable plastic tubing which connects to the vacuum pump. **3.** A set of clear tube tips to pick up seeds and spacers.

Specifications

Size: 3” W x 5.5” L x 2.5” H
Weight: 2 lb
Sterilization: Steam or ETO products only.
Do not gamma ray sterilize.

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Item #	Description
906-300	SeedVac™

NEEDLE LOADING PLATFORM AND SHIELD WITH VERTICAL NEEDLE HOLDER

The Needle Loading Platform and Shield with Vertical Needle Holder provides a convenient workstation for loading, counting and handling seeds prior to loading needles. It is designed to bring work up to a comfortable seated level, limiting movement and translates into more efficiency in the needle loading procedure, saving time.

The Needle Holder holds needles in place for loading and provides shielding for loaded needles. When stored in the Needle Holder, the needles are already positioned for an autoradiograph to verify and document the loading sequence. Additional Needle Holders can be used for storage if desired. Each Needle Holder can accommodate 20 needles with numbered stations in a shielded position.

Specifications

Size: 11” W x 12” L x 16” H
Weight: 22 lbs

CE

Item #	Description
906-330	Needle Loading Platform w/Shield & Vertical Needle Holder

MINI BETA SHIELD

For ^{125}Iodine or ^{103}Palladium

Arm Rest Optional

The free standing Mini Beta Shield is made of 1/8” thick stainless steel and specifically designed to protect personnel when handling beta-emitting isotopes. The shield easily fits on a bench top or cart. The shield is ideal for protection against ^{125}Iodine and ^{103}Palladium. A 8 mm thick x 10 “ square lead glass viewing area. The bottom of the shield has a 3/4” lip to contain any dropped seeds.

The optional arm rest is made of clear acrylic and has rubber pads to cushion the arms. The arm rest is 29” wide and 3 1/2” deep. The optional arm rest can be easily mounted to the stainless steel shield with two bolts into pre-drilled holes. The arm rest can be mounted in two different positions to the front of the shield, with arm rest forwards or backwards.

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Specifications

Viewing Area: 10 1/4” Sq.
Material: 1/8” thick stainless steel
Stainless Steel Density: 7.916 g/cm^3
Leaded Glass Density: 2.0 mm lead equivalency
Lead Glass: 4.8 g/cm^3
Lead Density: 11.35 g/cm^3
Shielding Equivalency:
1/2 Value Layer (^{125}Iodine) = .025 mm lead
Size: 12” W x 12” D x 20 1/2” H
Sterilization: Gas
Weight: 20 lbs

Item #	Description
906-081	Mini Beta Shield
906-082	Arm Rest for Mini Beta Shield

VERTICAL NEEDLE HOLDER

Positions needles for easy loading

- **Conveniently positions 20 needles vertically in numbered positions for easy loading**
- **Loaded needles are shielded with 1/16” of stainless steel**
- **The needle tips are in no danger of blunting as needles are suspended**
- **Can be used with any L-block shield as a stand device for storing loaded needles**
- **Needles are conveniently positioned for an utoradiograph**

An optional Rear Shield is available for the Vertical Needle Holder. The Rear Shield is made of 1/16" Stainless Steel and has a tab hook on each end to attach it to the top of the Vertical Needle Holder when standing upright.

Specifications

Size: 11.5" L x 4" W x 7.5" H (29.2 x 10.2 x 19 cm)
Weight: 6.5 lb (3 kg)

Item #	Description
906-332	Vertical Needle Holder
906-333	Rear Shield for Vertical Needle Holder

VERTICAL / HORIZONTAL NEEDLE BOX

For Iodine^{125} and Palladium^{103}

The Vertical / Horizontal Needle Box is made of stainless steel with a delrin needle top and a protective cover. The delrin needle top is scribed with an alphanumeric grid pattern, which can be customized. The needle box will accept a needle length of 25 cm. There are 169 needle holes, 13 horizontal and 13 vertical rows. The needle box fits into and latches to a removable bottom, for easy retrieval of loose seeds. The box has 2 side handles for easy mobility. The protective cover has a handle on top and latches to the needle box when not in use. The needle box can be used vertical or at a 60º slope when the legs are locked.
Note: This item can be custom made to customers specifications.

Specifications

Material: 11 Ga. Stainless Steel with 1/2" thick Delrin top
Density of Stainless Steel: 7.95 g/cm³
Density of Delrin: 1.415 g/cm³
Overall Size: 9 1/4" Sq. x 16 5/8" H
Needle Box Size: 9 1/4" Sq. x 11" H
Weight: 25 lbs
Sterilization: Gas or autoclave

Item #	Description
906-110	Vertical / Horizontal Needle Box

NEEDLE LOADING BOX

For Iodine^{125} and Palladium^{103}

The needle loading box is made of 1/4" thick aluminum. The box has a removable bottom with handles for easy retrieval of dislodged bone wax and radiation seeds from needles. The box has 6 needle tubes that are 9 mm in diameter. The rotating seed tray screws to the box and has seed and spacer holding areas (2.5 cm diameter x 3 mm deep) with a side rail to catch a seed/spacer not inserted into needle. Use the Seed Loading Vacuum Tweezers (Item 906-001) to insert seeds and spacers into needles.

Specifications

Overall Size: 4" W x 6" L x 9 1/4" H
Box Size: 4" W x 6" L x 5" H
Density: 2.7 g/cm³
Sterilization: Gas or Autoclave

Item #	Description
906-108	Needle Loading Box

SEED STERILIZATION AND SORTING TRAY

For sorting, sterilization, and drying seeds

Optional Shielding Cover

Sterilization of LDR Brachytherapy seeds is necessary before patient treatment. The Seed Sterilization and Sorting Tray is designed to allow clinicians to sort seeds into ten separate wells, 0.4 inches deep and 0.63 inches in diameter, according to source strength. Each well is stamped with a number for identification and can easily hold 10 to 20 seeds. The Seed Sterilization and Sorting Tray is 6.3 inches in diameter and fits easily into all autoclaves. One typical drying cycle completely dries the seeds before the tray is removed from the autoclave. Other seed storage devices may leave seeds wet, making them more difficult to handle.

Before and after seed sterilization the 3/16" aluminum loading cover of the Seed Sterilization and Sorting Tray is locked down over the wells to shield clinicians from radiation. The loading cover has one hole in it and can be rotated so the hole is positioned over one well at a time. During use, seeds from only that well are exposed while being loaded into the treatment system. The un-exposed wells are then shielded to prevent exposure from the wells not being used. The hole can also be positioned between two wells to prevent any exposure from LDR seeds in the wells. The loading cover can be locked in place to prevent spilling seeds while transporting them.

Features

- Store seeds in 10 different wells while shielding the operator from radiation
- Loading Cover exposes one well at a time or covers all wells
- Combine with the Seed Slider and the Seed Alignment Tray to speed up the needle loading process, while minimizing exposure and seed handling
- Sterilization Cover secures seeds during sterilization
- Seeds dry completely in one autoclave cycle
- Optional shielding cover (906-3161) locks in place to secure seeds in wells and helps prevent spilled seeds during transport.

Specifications

Size: 6.3" dia. x 4.13" H
Material: Anodized Aluminum
Sterilization: Steam ONLY, **Do not** ETO or gamma ray sterilize
Weight: 2.5 lbs

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Item #	Description
906-315	Seed Sterilization and Sorting Tray
906-316	Optional Shielding Cover

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SEED ALIGNMENT TRAY

Aligns seeds and spacers for easy access

The Seed Alignment Tray is used with the SeedVac™ to conveniently load LDR brachytherapy needles and reduce radiation exposure to clinicians. The Seed Alignment Tray can be used alone or fitted to the Seed Sterilization and Sorting Tray.

Six grooves are provided to align seeds in one direction for easy pickup with SeedVac™. Seeds are simply transferred out of the tray wells and slid into position using the provided spatula and reverse action tweezers.

Features

- Uniform seed alignment helps reduce arm movement and speeds-up the needle loading process
- Interfaces with the Seed Sterilization and Sorting Tray (Item 906-315) for protection from radiation
- Includes spatula and reverse action tweezers

Specifications

Size: 5.5" W x 5.5" L x 1.5" H
Material: Aluminum
Weight: 1 lb

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Item #	Description
906-310	Seed Alignment Tray

SEED SLIDER

For horizontal loading of seeds & spacers into prostate needles

The Seed Slider is specifically designed to be the most efficient instrument for loading seeds and spacers into prostate implant needles. Clinicians align the seeds and spacers into a slot per treatment prescription and encapsulate the seeds and spacers using a cover. The needles lock onto one side of the Seed Slider with a Luer-Lok® and a needle stylet is inserted to smoothly push the seeds and spacers into the treatment needle. The Seed Slider when used with the Seed Sterilization and Sorting Tray can be sterilized together saving time and effort.

Features

- Minimize risk of dropping seeds
- View and verify seeds and spacers easily on the loading slot to confirm positioning before loading into needles
- Lock needles onto one side of the Seed Slider with Universal Luer Lok™
- Universal Luer Lok™ is adjustable to implant needles
- Use with Seed Sterilizer and Sorting Tray for radiation protection
- Store seeds inside the tray and access as needed
- Simply take seeds out of the tray wells and slide into position using the provided spatula
- Fast loading - 25 needles in about 8 minutes

Specifications

Size: 5" W x 4.5" L x 1.06" H
Sterilization: Steam or ETO ONLY, **Do not** gamma ray sterilize
Material: Anodized Aluminum
Weight: 1 lb

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Item #	Description
906-305	Seed Slider

STERILIZATION VIAL FOR RADIOACTIVE SEEDS

The Sterilization Vial is made of 1/8” stainless steel. Inside is a 1” diameter stainless steel mesh basket with the bottom of the basket made of 1/8” stainless steel. The basket bottom is shielded where the vial bottom is open. The vial bottom has a 2 cm diameter opening, which allows the gas or steam to go around and enter the mesh basket. The top has a screw on stainless steel cap with a Teflon® seal.

Specifications

Container Material: 1/8” Stainless Steel
Container Dimension: 1 5/8” Dia. x 2 7/8” H
Basket Material: 100 Mesh Stainless Steel
Basket Dimension: 1” Dia. x 1 7/8”
Sterilization: Autoclaved or Gas

Item #	Description
906-060	Sterilization Vial for Radioactive Seeds, Stainless Steel

DIDDLER

The Diddler is a device to adjust the position of transperineal needles as they are implanted through the templates. The Diddler is constructed of stainless steel and consists of a slender tip and knurled handle. This tip is constructed such that needles can be adjusted up, down, and sideways, even if there is a needle right next to it.

Sterilization: The Diddler can be Autoclaved.

Item #	Description
906-230	Diddler

SPRING LOCK FOR PROSTATE NEEDLES

This spring lock can be used to tighten the needles used in prostate implants.

Item #	Description
906-290	Spring Lock for Prostate Needles

SEED SENSOR™

The Seed Sensor™ radiation monitor is highly collimated so the detector can locate a loose seed in a needle loading work area. The detecting area is as directional as a flashlight which helps to quickly identify the position of a lost seed on a table or in a room. Other survey meters are typically unable to locate a small, implant seed because they are not to be directional.

The Seed Sensor™ is shielded to resist extraneous radiation and to reduce background radiation so it is very useful in detecting sources in areas where other radioactive sources are located.

Features

- Ideal for a quick survey of implant rooms and needle loading stations
- Sensitive to 50 cm for the lowest energy prostate implant sources
- Small, fits easily into a lab coat pocket, 1.25” x 3.25” x 6.25”
- Geiger-Mueller tube detector
- Activity: a 1 mCi palladium seed can be detected at 100 cm
- A 41 cm diameter field is covered at a 100 cm distance
- Power: one alkaline 9 VDC battery, estimated battery life is 20 hours

Specifications

Power
Requirements: 9 VDC Battery
Approximate Lifetime: 20 hours continuous use

Operating Conditions
Pressure: 680 to 770 mm Hg
Temperature: 10 to 40°C
Relative Humidity: 20 to 80%, non-condensing

Item #	Description
906-340	Seed Sensor™

BRACHYTHERAPY QA PHANTOM

Perform QA on sidefire transrectal probes

Features

- Internal grid assessment
- Probe retraction step assessment
- Volume verification
- Includes rugged carrying case

The Brachytherapy QA Phantom is designed to enable users to check key imaging parameters such as depth of penetration, axial and lateral resolution, distance measurements, area measurements, volume measurements and geometric consistency with the treatment planning computer.

When scanning towards the top of the phantom, a partial grid of wires appears. This N-shaped pattern should line up with the electronic grid that appears on your screen thus ensuring correct vertical and horizontal distance measurements. This target group can also be used to assess axial and lateral resolution of the system. Five cross wires are embedded within the phantom to determine if the probe is being retracted by the stepper system by the specified distance.

Turn the probe 60 degrees to the right or left to visualize and measure the volume of three different calibrated objects, one of which is non-spherical.

Specifications:

Material: Zerdine™(1)
Attenuation Coefficient: 0.50 ± 0.05 dB/cm-MHz
Speed of Sound: 1540 m/s ± 10 m/s

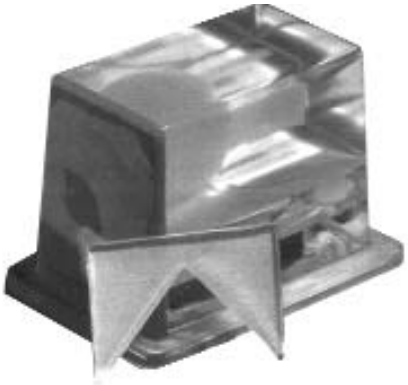
Targets:
Internal Gid Assessment:
Material: Nylon Monofilament
Diameter: 0.5 mm
Number of Targets: 13
Position: B1 - B5, C4, D3, F1 - F5

Probe Retraction Assessment:
Material: Nylon Monofilament
Diameter: 0.5 mm
Number of Targets: 5
Spacing: 0.1 cm, 1 cm, 1.5 cm and 0.5 cm
Position: Along row 4

Volumes:
Material: Zerdine™(1)
Sizes: Approximately 4 cc, (S), 9 cc (M) and 20 cc (L). Measured volumes provided on certification sheet

Item #	Description
906-450	Brachytherapy QA Phantom

ULTRASOUND PROSTATE TRAINING PHANTOM



The Ultrasound Prostate Training Phantom is a disposable phantom developed for practicing permanent seed implantation procedures. It contains several unique features to assist the teaching and learning process.

The simulated perineal membrane permits needle insertion with realistic resistance. In addition, the area below the rectal wall is a clear gel to permit visualization of probe orientation. The prostate is transparent to allow visual verification of seed placement. The phantom also includes a removable pubic arch simulation.

This modification was developed with Dr. Peter Grimm and his associates at the Seattle Prostate Institute.

Specifications

Container:
Material: Clear acrylic
Dimensions: 11.5 cm x 7.0 cm x 9.5 cm
Front Probe Opening: 3.2 cm diameter
Rear Probe Opening: 2.6 cm diameter

Perineal Membrane:
3 mm thick urethane

Background Gel:
Similar to water with very little backscatter attenuation £ 0.07 db/cm/MHz

Urethra:
Dimensions: .7 cm diameter
Material: Zerdine™ (1), low scatter

Seminal Vesicles:
Dimensions: 7 mm diameter x 10 cm long
Material: Zerdine™ (1)
Properties: Speed = 1540 m/s
Attenuation = .5 dB/cm/MHz
Backscatter similar to liver tissue

Prostate:
Dimensions: 4 cm x 4.5 cm x 4.0 cm
Material: Zerdine™ (1), low scatter

Rectal Wall:
Dimensions: 6 cm x 11 cm x .2 cm
Material: Zerdine™ (1)
Properties: Speed = 1540 m/s
Attenuation = .5 dB/cm/MHz
Backscatter similar to liver tissue

Note: This phantom is not intended to ultrasonically mimic the human prostate.

Other Features:
Removable pubic arch
(1) US Patent # 5196343

Item #	Description
906-400	Ultrasound Prostate Training Phantom