uon™ Thermoplastic Disposable Head Immobilization Masks
Nuclear Associates Model 38-600

- Precise-fit thermoplastic disposable u-frame head immobilization masks
- Unique perforation pattern
- Solid (unperforated) rim at the edge of the thermoplastic
- U-shaped frame is compatible with most baseplates
- Frame label contains all traceability data
- Virtually no shrinkage
- Better fixation
- No waste
- Excellent skin sparing effect
- Unbreakable, nonstick, nonabrasive
- Low working temperature
- No pressure points, for greater patient comfort

Introduction
Uon is a low temperature thermoplastic material that is ideally suited for patient immobilization during radiation therapy treatments of the head and neck area. The uon material is unbreakable and will not stick to the patients skin. Patient comfort is significantly improved since there are no pressure points or abrasive edges.

Applications
New developments in radiation therapy treatment methods like high energy photon / electron beam treatments and IMRT have made the need for precise and effective patient immobilization a critical component of the treatment prescription. Uon Precise-Fit Disposable U-Frame Masks provide the means to consistently and safely restrict patient movement during the radiation treatment cycle.

Specifications

12 month blanket purchase order pricing*
- Significant reduced pricing
- Guaranteed pricing for the 12 month period
- 13th month FREE (based on same quantity used in previous 12 months)
- Automatic shipments each month

The masks may be purchased on a 12-month blanket purchase order. For example, if your facility used an average of 20 masks per month, your order would be for 240 units (20 per month).

<table>
<thead>
<tr>
<th>Qty.</th>
<th>Level I</th>
<th>Level II</th>
<th>Level III</th>
<th>Level IV</th>
<th>Level V</th>
<th>Level VI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 (60)</td>
<td>10 (120)</td>
<td>20 (240)</td>
<td>30 (360)</td>
<td>40 (480)</td>
<td>50 (600)</td>
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</table>

** Pricing is based on receiving a purchase order for the appropriate quantity level pricing for onetime delivery.

Unit and special quantity discount pricing**

<table>
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<tr>
<th>Qty.</th>
<th>Level I</th>
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<th>Level III</th>
<th>Level IV</th>
<th>Level V</th>
<th>Level VI</th>
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</thead>
<tbody>
<tr>
<td>5+</td>
<td>10+</td>
<td>20+</td>
<td>30+</td>
<td>40+</td>
<td>50+</td>
<td></td>
</tr>
</tbody>
</table>

* Pricing is based on receiving a purchase order for the quantity of masks required. Quantity in parentheses ( ) denotes annual blanket purchase order volume.

For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4608, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.
Specifications are subject to change without notice. Check for availability outside US.

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38-600-ds rev 1 11 mar 03
Mold-and-Hold
Model 17-5 Series

Introduction
Mold-and-Hold was developed to meet the requirements of the radiation oncology and imaging departments. Designed as a highly reliable system of patient fixation for radiotherapy, Mold-and-Hold is ideal for patient immobilization and positioning in radiation therapy and all forms of diagnostic imaging, including CT, MRI, ultrasound, x-ray and nuclear medicine. Mold-and-Hold cushions will hold a patient comfortably and securely throughout the course of any treatment where the patient has to be immobile during prolonged or multiple exposures, and during radionuclide scans.

Applications
The Mold-and-Hold cushions are made of special, double-sealed, non-tinted, durable plastic sheeting filled with radiolucent polystyrene spheres. This design allows Mold-and-Hold to be precisely molded to the patient’s body contours. These reusable airtight cushions will hold their shape for more than 60 days, so there is no need to remold the cushion during the course of treatment. The cushions are almost air-equivalent and will only increase the buildup effect by a few percent.

The Mold-and-Hold System is comfortable for the patient, easy to work with, and consists of only a few components. Mold-and-Hold is designed so that repositioning during simulation or treatment can be easily made in minutes. When a patient has completed their course of therapy, air is allowed back into the cushion, which may now be cleaned and stored, ready for the next use.

Mold-and-Hold components
- **Cushions**
  Mold-and-Hold cushions come in a variety of shapes, sizes, and degree of filling
- **Patient jig**
  Designed for general fixation and for making shells ready for simulator or accelerator
- **Molding sheet**
  Made of heavy, flexible plastic, this sheet is necessary to prevent the Mold-and-Hold cushion from getting trapped and damaged between the base and the sides of the patient jig

- A versatile and cost-effective system designed to aid in patient positioning and immobilization during radiation therapy treatments
- Ideal for use in Radiation Therapy, Radiology, MRI, CT, Ultrasound, and Nuclear Medicine
- Radiolucent; will not create artifacts or shadows
- Does not require mold rooms with special ventilation
- Repositioning during simulation or treatment can be made quickly
- Compatible with other fixation vacuums
- Does not need to be remolded during the treatment cycle
## Specifications

### Available model(s)

<table>
<thead>
<tr>
<th>Model</th>
<th>Application</th>
<th>Size</th>
<th>Liter fill†</th>
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</thead>
<tbody>
<tr>
<td>17-518-6500</td>
<td>Pelvis</td>
<td>150 x 100 cm</td>
<td>65</td>
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<tr>
<td>17-518-7000</td>
<td>Pelvis</td>
<td>150 x 100 cm</td>
<td>70*</td>
</tr>
<tr>
<td>17-518-7500</td>
<td>Pelvis</td>
<td>150 x 100 cm</td>
<td>75</td>
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<tr>
<td>17-519-3500</td>
<td>Thorax</td>
<td>100 x 100 cm</td>
<td>35</td>
</tr>
<tr>
<td>17-519-4000</td>
<td>Thorax</td>
<td>100 x 100 cm</td>
<td>40*</td>
</tr>
<tr>
<td>17-519-4500</td>
<td>Thorax</td>
<td>100 x 100 cm</td>
<td>45</td>
</tr>
<tr>
<td>17-519-5000</td>
<td>Thorax</td>
<td>100 x 100 cm</td>
<td>50</td>
</tr>
<tr>
<td>17-520-2000</td>
<td>General purpose head, neck, extremities</td>
<td>100 x 50 cm</td>
<td>20</td>
</tr>
<tr>
<td>17-521-2500</td>
<td>Breast</td>
<td>100 x 70 cm</td>
<td>25</td>
</tr>
<tr>
<td>17-521-3000</td>
<td>Breast</td>
<td>100 x 70 cm</td>
<td>30*</td>
</tr>
<tr>
<td>17-521-3500</td>
<td>Breast</td>
<td>100 x 70 cm</td>
<td>35</td>
</tr>
<tr>
<td>17-521-4000</td>
<td>Breast</td>
<td>100 x 70 cm</td>
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<tr>
<td>17-522-9650</td>
<td>Small standard</td>
<td>100 x 25 cm</td>
<td>6.5*</td>
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<tr>
<td>17-522-9750</td>
<td>Small standard</td>
<td>100 x 25 cm</td>
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<td>17-523-9175</td>
<td>Small standard</td>
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<td>17-523-9200</td>
<td>Small standard</td>
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<tr>
<td>17-523-9225</td>
<td>Small standard</td>
<td>50 x 25 cm</td>
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<td>17-524-1200</td>
<td>Small standard</td>
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<td>12</td>
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<td>17-524-1250</td>
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<td>12.5</td>
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<tr>
<td>17-524-1500</td>
<td>Small standard</td>
<td>70 x 50 cm</td>
<td>15</td>
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<tr>
<td>17-525-1500</td>
<td>Head/neck region</td>
<td>S1</td>
<td>15</td>
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<tr>
<td>17-525-1750</td>
<td>Head/neck region</td>
<td>S1</td>
<td>17.5*</td>
</tr>
<tr>
<td>17-525-2000</td>
<td>Head/neck region</td>
<td>S1</td>
<td>20</td>
</tr>
<tr>
<td>17-525-2500</td>
<td>Head/neck region</td>
<td>S1</td>
<td>25</td>
</tr>
<tr>
<td>17-526-9300</td>
<td>Brain tumors</td>
<td>S2</td>
<td>3</td>
</tr>
<tr>
<td>17-526-9400</td>
<td>Brain tumors</td>
<td>S2</td>
<td>4</td>
</tr>
<tr>
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<td>5</td>
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<tr>
<td>17-526-9600</td>
<td>Brain tumors</td>
<td>S2</td>
<td>6</td>
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<tr>
<td>17-527-2250</td>
<td>Laryngeal/esophageal/upper thoracic cancers</td>
<td>S3</td>
<td>22.5*</td>
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<tr>
<td>17-527-2500</td>
<td>Brain tumors</td>
<td>S3</td>
<td>25</td>
</tr>
<tr>
<td>17-527-3000</td>
<td>Brain tumors</td>
<td>S3</td>
<td>30</td>
</tr>
<tr>
<td>17-528-5000</td>
<td>Breast cancer</td>
<td>S4</td>
<td>50</td>
</tr>
</tbody>
</table>

† The heavier the patient, the higher the degree of filling required.

* Suggested liters for first order.

## Optional accessories

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-502</td>
<td>Vacuum Pump</td>
</tr>
<tr>
<td>17-504</td>
<td>Air Hose Assembly (for use with hospital central vacuum system)</td>
</tr>
<tr>
<td>17-507</td>
<td>Cushion Repair Kit</td>
</tr>
<tr>
<td>17-508-1000</td>
<td>Patient Jig with Straight Sides, includes one set of Magnets for “Window”</td>
</tr>
<tr>
<td>17-508-2000</td>
<td>Patient Jig with Curved Sides, for CT scanning</td>
</tr>
</tbody>
</table>

For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4606, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.

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Introduction
The Prone Breast Positioning Device (Model 37-018) is an innovative linear accelerator couch-mounted platform for breast irradiation, designed specifically to facilitate the administration of safe, effective radiation therapy to women with large or pendulous breasts, who have breast cancer and who opt for breast-conserving therapy.

Applications
Clinical advantages:

- Easy treatment of women with large or pendulous breasts
  - Facilitates breast conserving therapy
  - Improves reproducibility of treatment setup

- Allows heart and lungs to be avoided
  - Important for women with pre-existing cardiac and pulmonary conditions
  - Reduces the chance of long-term effects on heart and lungs

- Significantly reduces skin reaction through improved dose homogeneity
  - Treatment breaks are less likely, due to improved skin tolerance
  - Allows treatment to be given in a continuous course, which is oncologically preferable
  - May facilitate simultaneous administration of chemotherapy in some women
  - May allow patients with connective tissue disorders to receive treatment

- Simplifies breast boosts by making photon treatment possible
  - Eliminates the need for electron capability when treating breast patients
  - Skin-sparing boost treatment (photons) decreases skin reactions

Dosimetric advantages:

- Minimizes radiation scatter to the contralateral (opposite) breast
  - The opposite breast can be moved away from the field edge, using a styrofoam bridge/wedge

- Beam modifiers (wedges) may not be required to improve homogeneity
  - Reduces the complexity of treatment
  - Minimizes “hot spots” in the treated breast
  - Minimizes internal scatter to the heart and lungs

Specifications
Dimensions (in the closed position)
23 (w) x 72 (d) x 16 in (h) (58 x 183 x 41 cm)

Weight
80 lb (36.36 kg)

Optional accessories
- Immobilization Positioning Cushion (Model 37-018-3000)
- Foam Wedges (Model 37-018-4000), set of 2

Available model(s)
37-018 Prone Breast Positioning Device

Free clinical study reprint available

References


Tungsten Eye Shields
Model 37-936 Series

Introduction

The Tungsten Eye Shield can use either the 0.5 or 1 mm thick anodized aluminum cap (both are included with each tungsten eye shield) to reduce the electron backscatter to the eyelid. The eye shield can be used without the aluminum cap when placed superficially.

Tungsten eye shields have less transmission than other eye shields.

Recommendations based on transmission values

The 2 mm tungsten eye shield should be used for 6 MeV, and the 3 mm tungsten eye shield should be used for 9 MeV. These tungsten eye shields are not recommended for use above 9 MeV.

The user will have to determine an acceptable amount of backscatter to decide whether to use 0.5 or 1 mm aluminum cap. Use diagram and table.

Sterilization

Clean with soap and water, rinse thoroughly with water as soap residue will burn the eye. Gas or Autoclave, separate caps and shield before sterilization. Follow cleaning directions carefully to preserve the tungsten eye shields.

Specifications

Tungsten density 17 g/cm³
Aluminum density 2.718 g/cm³

Diagram 1. The doses are normalized to d_max without the eye shield (Diagram 1) using a 10 x 10 cone. When 100% is delivered to d_max using 6 MeV with the shield, you get 108% to the undersurface of the eyelid (Point 1) and 3.4% to lens (Point 2) (see table)

Transmission using XV-2 film*  Backscatter using TLDs†
6 MeV 9 MeV 6 MeV 9 MeV
3.4% 5.6% 108% 111% 2 mm Tungsten
3.0% 4.8% 103% 106% 2 mm Tungsten + 0.5 mm Aluminum
3.0% 4.4% 95% 102% 2 mm Tungsten + 1 mm Aluminum
2.5% 3.3% 112% 113% 3 mm Tungsten
2.4% 2.9% 102% 105% 3 mm Tungsten + 0.5 mm Aluminum
2.5% 2.8% 97% 106% 3 mm Tungsten + 1 mm Aluminum

* XV-2 Film placed under/below tungsten eye shield at 3 mm depth (anterior surface of lens).† TLD Microcubes placed under simulated eyelid using tungsten eye shields.

For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4608, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.

Specifications are subject to change without notice. Unreferenced data on this product is preliminary findings of RPD, Inc. and is not to be used as technical reference.

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37-936 dis rev 1 11 mar 03

For electron or superficial shielding
Less transmission than other eye shields
Reduces electron backscatter to eyelid

Model* Thickness Dimension A Dimension B Dimension C Dimension D
37-936-0583 2 11.6 15.7 17.8 18.8
37-936-0585 2 13.3 17.4 19.5 20.5
37-936-0587 2 15.0 19.1 21.1 22.1
37-936-0589 2 16.7 20.8 22.9 23.9
37-936-0591 2 18.4 22.5 24.6 25.6
37-936-0596 3 11.0 17.4 19.5 20.5
37-936-0598 3 12.7 19.1 21.2 22.2
37-936-0601 3 14.4 20.8 22.9 23.9
37-936-0623 3 16.1 22.5 24.6 25.6
37-936-0627 3 17.8 24.2 26.3 27.3

Round Testicle Shields and Adjustable Testicle Shield Stand
Model 37-937 Series

The lead testicle shields are designed with a dome and groove interlock to eliminate radiation leakage where the top and bottom half blocks are joined together and to prevent the halves from sliding apart. The shield’s top and bottom halves can be secured together with two rubber straps (supplied with each unit) or with nylon tape. Rotating the entrance of the shield toward the ceiling will reduce scatter radiation from entering the shield. A soft cotton sock can be used to cover the testicles when placing them inside a cold shield. The testicle shield is available in three sizes: small, medium, and large. When using the Adjustable Shield Stand, no straps are needed. This easily Adjustable Testicle Shield Stand will cradle all round testicle shields. A hand knob allows for easy vertical adjustment from 1 to 10 inch (five turns per inch). The counter weighted base is made of cast iron. A plastic plate, secured to the base, provides easy positioning. The unit can be used for anterior and posterior treatments.

It is recommended that the Adjustable Testicle Shield Stand be used while raising and lowering the testicle shields, as this will reduce patient discomfort.

Specifications

Small (Model 37-937-0200)
Size 2 in ID x 3 in OD (5 x 7.6 cm)
Weight 4 lb (1.6 kg)

Medium (Model 37-937-0250)
Size 2.5 in ID x 3.5 in OD (6.4 x 9 cm)
Weight 5.7 lb (2.6 kg)

Large (Model 37-937-0300)
Size 3 in ID x 4 in OD (7.6 x 10.2 cm)
Weight 7.25 lb (3.3 kg)

Stand (Model 37-937-0505)
Size 5 (w) x 10 (d) x 13.5 in (h) (12.7 x 25.4 x 34.3 cm)
Weight 10.6 lb (4.8 kg)

Available model(s)
37-937-0200 Testicle Shield, Small Round, 2 inch ID
37-937-0250 Testicle Shield, Medium Round, 2.5 inch ID
37-937-0300 Testicle Shield, Large Round, 3 inch ID
37-937-0500 Testicle Shields, Set of 3, Small, Medium, and Large
37-937-0505 Adjustable Stand for Round Testicle Shields

For additional information, please contact Cardinal Health, Radiation Management Services customer service at 440.248.9300, 800.850.4608, or fax: 440.349.2307; located at 6045 Cochran Road, Cleveland, Ohio 44139-3303, USA.
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**Oncology Skin Care Products**

**Nuclear Associates Models 37-06 Series**

**Alra® Milk Conditioning Shampoo**

- Minimizes hair damage while cleansing and conditioning the hair and scalp

Oncology therapy can cause normal hair to become extremely dry and brittle, and the scalp to be very sensitive. While no shampoo can prevent hair loss caused by some chemotherapy drugs, Alra Mild Conditioning Shampoo from Nuclear Associates is an extra-gentle formula that is acid-balanced and specially-formulated to minimize hair damage.

Ingredients include: aloe vera gel, panthenol (provitamin B-5), and aromatic oil of rosemary, to stimulate scalp circulation.

**Available model(s)**

- **37-065** Alra Mild Conditioning Shampoo, 8 oz bottle. Quantities 1 to 11; 12 or more

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**Alra® Non-Metallic Deodorant**

- Free of metallic ingredients that can interfere with radiation therapy treatments

Alra Non-Metallic Deodorant from Nuclear Associates is specifically formulated to eliminate perspiration odor and wetness without the use of metallic ingredients that may interfere with treatments. This gentle, nonirritating deodorant contains oil of cypress, a clean-smelling natural fragrance that both male and female patients like, and lichen extract, a natural bactericide and fungicide.

**Available model(s)**

- **37-066** Alra Non-Metallic Deodorant, 2.5 oz stick. Quantities 1 to 11; 12 or more

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**Alra® Radiation Therapy Lotion**

- Provides quick, reliable relief from acute radiation dermatitis
- Nonirritating, non-allergenic
- Does not interfere with ongoing treatment

Alra Radiation Therapy Lotion from Nuclear Associates is the only lotion specifically developed for the treatment of skin exposed to radiation therapy. It contains a highly concentrated emulsion of aloe vera gel, lanolin, vitamin E, soluble collagen, and allantoin. It does not contain water, glycerin, mineral oil, alcohol or added fragrance.

In patient studies conducted at the Cedars-Sinai Comprehensive Cancer Center in Los Angeles, none of the patients treated with Alra Radiation Therapy Lotion showed irritation or allergic reactions. This soothing lotion aids in the replacement of damaged tissue, helping the natural healing process to take place.

**Available model(s)**

- **37-064** Alra Radiation Therapy Lotion, 4 oz bottle. Quantities 1 to 11; 12 or more
- **37-064-1000** Alra Radiation Therapy Lotion, 1 oz bottle. Quantities 1 to 11; 12 or more

---

"I recently received radiation therapy to the face and neck area, and found that your product was the only lotion that soothed my skin that was damaged by the radiation rays."

— G.L.S., Clinton, Maryland