

# Oakton® Temperature Compensated Barometers

## Model 37-020



- Ideal for easy, accurate, on-site pressure readings

Oakton® Temperature Compensated Barometers measure atmospheric pressure in millibar (mbar) and inches Hg or millibar or mm Hg. Barometers also monitor temperature and provide temperature compensation with a built-in bimetal thermometer. Ideal for monitoring impending weather changes. Barometers are encased in brass with bezel for wall mounting.

### Specifications

**Parameter** Atmospheric pressure, temperature

#### Range

**Atmospheric pressure** 930 to 1070 mbar

37-020: 27.5 to 31.6 inch Hg

37-020-2200: 698 to 802 mm Hg

**Temperature** 14° to 122°F (-10° to 50°C)

#### Resolution\*

**Atmospheric pressure** 1 mbar

37-020: 0.1 inch Hg

37-020-2200: 1 mm Hg

**Temperature** 1.0°F (1.0°C)

#### Accuracy

**Atmospheric pressure** ± 1 mbar

37-020: ± 0.03 inch Hg

37-020-2200: ± 1 mm Hg

**Temperature** ± 1.8°F (± 1°C)

**Dimensions** 2 (d) x 6.1 inch Ø (5 x 15.5 cm)

**Weight** 3 lb (1.4 kg)

#### Available model(s)

**37-020** Oakton Temperature Compensated Barometer, measures in mbar and inches Hg

**37-020-2200** Oakton Temperature Compensated Barometer, measures in mbar and mm Hg

\* Altitude resolution for Model 37-020-2200 is 1 meter from -500 to 1000 m, 2 meters from 1001 to 7000 m. The standard Model 37-020 has a resolution of 0.9°F (± 0.5°C).

# NIST Traceable Digital Thermometer

## Model 07-405



The NIST Traceable Digital Thermometer (Model 07-405) is a rugged, low-cost, lollipop-type, wide-range digital thermometer to replace hazardous mercury units. It employs micro-electronics for reliability and utilizes a liquid crystal display for accurate reading. It features an easy-to-read heads-up display. The reading updates every second, and at the touch of a button, the memory recalls highest and lowest readings. The 20 cm long stainless steel stem is impervious to acids, bases, and solvents. The thermometer includes a NIST traceable calibration certificate.

### Specifications

**Range** -58° to 572°F (-50° to 300°C)

**Accuracy** Within ± 0.2°C, from -20° to 100°C

**Resolution** 0.1°C between -20° to 200°C

**Display** 3.50 digit LCD, 6.35 mm high digits

**Dial diameter** 38 mm

**Display update** 1 second

**Probe** Stainless steel stem, 3.2 mm Ø x 20.3 cm

**Power** Type 389 1.5 V silver oxide battery (included)

**Battery life** One year continuous operation

**Weight** 23 g

#### Available model(s)

**07-405** NIST Traceable Digital Thermometer

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.

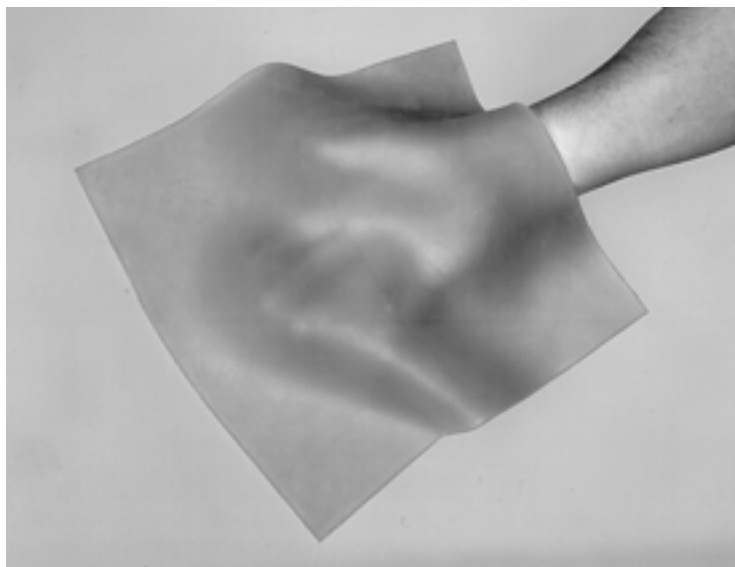
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# Superflab Plastic Bolus Material\*

## Model 37-07 Series



Radiation Oncology



- Conforms nicely to patient contour, while maintaining good uniformity of thickness
- For maximum dose buildup to skin
- Tissue-equivalent
- Flexible
- Will not dry out
- Choice of thicknesses from 0.3 to 4 cm
- Approved by the FDA for human contact

### Introduction

A search for a tissue-equivalent bolus substance which is both flexible and will not dry out led to the development of Superflab Plastic Bolus.

### Applications

This unique material is a synthetic oil gel having a specific gravity of 1.02. It is based on vinyl-plastic containing a large amount of disodecyl phthalate, and includes only materials approved by the FDA for human contact.

Superflab comes in thicknesses which provide maximum dose buildup for relevant photon energies. Since the material does not suffer inelastic strain for normal stresses, it does not have to be bagged or wrapped in plastic film to maintain its shape. At the option of the user, however, the bolus can be wrapped in disposable plastic film for cleanliness. Or, Superflab can be washed with soap and water as needed, followed by an application of talcum powder or cornstarch.

### Available model(s)

Standard sizes	
Model	Dimensions and thicknesses
37-070	30 x 30 x 0.3 cm
37-071	30 x 30 x 0.5 cm
37-072	30 x 30 x 1.0 cm
37-073	30 x 30 x 1.5 cm
37-074	30 x 30 x 2.0 cm
37-075	30 x 30 x 2.5 cm
37-076	30 x 30 x 3.0 cm
37-078	30 x 30 x 4.0 cm

Extra-large sizes	
Model	Dimensions and thicknesses
37-071-4040	40 x 40 x 0.5 cm
37-072-4040	40 x 40 x 1.0 cm
37-074-4040	40 x 40 x 2.0 cm
37-076-4040	40 x 40 x 3.0 cm
37-078-4040	40 x 40 x 4.0 cm

*Custom sizes available*

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37-07-ds rev 1 11 mar 03

\* Developed by Gene R. Feaster, Ph. D., Department of Radiation Therapy, University of Kansas Medical Center.

# Invisible Fluorescent Marking Kit

## Model 17-800

- Eliminates conspicuous skin markings which present a cosmetic problem to outpatients
- Delineates a radiotherapy treatment field with a long-lasting skin dye that is visible only under ultraviolet (black light)



### Specifications

**Dimensions** 2 (w) x 10.50 (l) x 1.63 in (h)  
(5 x 26.7 x 4 cm)

**Weight** 1.125 lb (0.5 kg)

#### Optional accessories

**Spectra-Glo Fluorescent Skin Dye**, 1 oz  
(Model 17-801)

**Wall-Mount and Holder** (Model 17-802)

**Skin Marker Lamp** (Model 17-803)

**Replacement UV Bulb** (Model 17-805)

#### Available model(s)

**17-800** Invisible Fluorescent Marking Kit

### Introduction

Indelible skin paints and inks have generally been used to outline a therapy field for positioning purposes. However, when exposed skin surfaces (head, neck, etc.) are involved, such conspicuous markings have presented a disturbing cosmetic problem, especially to outpatients in constant interaction with other people. The Invisible Fluorescent Marking Kit eliminates this problem because the fluorescent dye can be seen only under an ultraviolet (black light) source. The kit consists of a hand-held ultraviolet source and a one-ounce container of Spectra-Glo fluorescent skin dye.

### Applications

Using a cotton swab, the treatment area is outlined with the invisible fluorescent dye. After a brief drying period, the painted area will withstand washing or bathing, but should not be scrubbed. To make the outline visible, the black light source is directed toward the therapy area. The painted outline is clearly visible as a fluorescent glow.

One application of dye usually lasts about three to five days. As the glow begins to fade, however, the outline can be repaired with Spectra-glo. The black light source uses a bulb with a long wavelength (3660 Å) and has no injurious effect on skin or open eyes.

**Note:** This product is not available in 220 V.

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17-800-ds rev 1 11 mar 03

# Therapy Dosimetry Cassettes\*

## Model 74-387

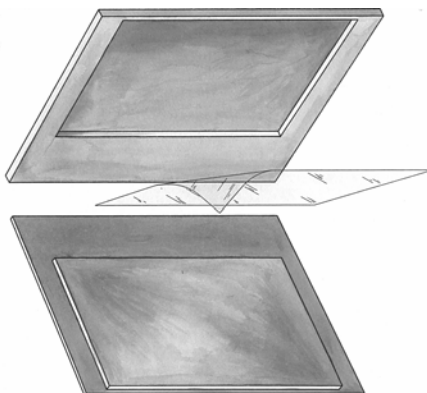


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**Two problems:** Controlling the position of the film inside of the cassette and controlling artifacts caused by air pockets in film pack envelopes during electron and photon beam film dosimetry.

**One answer:** The Therapy Dosimetry Cassette. These high-quality cassettes eliminate these problems by fixing the geometry of the film with respect to the cassette, and surrounding the film with either a polystyrene (Model 74-387) or acrylic (Model 74-397) material.

For measurements parallel to the central beam, the long edge of an 8 x 10 inch film is always 3 mm from the outside surface of the cassette. For measurements perpendicular to the central beam, the film is always 1 cm from the top surface of the cassette. Additionally, the cassette provides superior film surface contact and is easy to load in a light-tight environment.



- For electron and photon beam film dosimetry
- Available in polystyrene and acrylic
- For measurements parallel and perpendicular to the central beam
- Fixed film geometry inside the cassette
- Excellent film-surface contact
- Fits existing SCRAD phantoms
- Position markers allow precise orientation of film

### Available model(s)

- 74-387** Therapy Dosimetry Cassette, Polystyrene, 8 x 10 in, 3.5 lb
- 74-387-1012** Therapy Dosimetry Cassette, Polystyrene, 10 x 12 in, 4 lb
- 74-397** Therapy Dosimetry Cassette, Acrylic, 8 x 10 in, 3.5 lb
- 74-397-1012** Therapy Dosimetry Cassette, Acrylic, 10 x 12 in, 4 lb

\* Designed by Lawrence E. Reinstein, Ph.D.

# Electron Filter

## Model 56-785

When used as a shadow tray or as the top of a beam-block table for megavoltage beams, Model 56-785 Electron Filter, made of Clear-Pb, reduces electron contamination and patient surface dose by 20 to 25%, as compared to acrylic.

This 12 x 12 inch electron filter is compatible with most shadow tray holders; other filter sizes are available on special order.

### Specifications

**Material** CLEAR-Pb Lead-Plastic

**Lead equivalence** 0.3 mm

**Dimensions** 12 x 12 x 0.25 in thick

**Weight** 2.7 lb

**Available model(s)**

**56-785** Electron Filter

- For megavoltage photon beams
- Made of CLEAR-Pb® Lead-Plastic
- Reduces electron contamination and skin dose
- Compatible with most shadow tray holders

### Free clinical study reprints available

1. K. Breitman and M. Sourba, Manitoba Center Treatment and Research Foundation, Dept. of Medical Physics, Winnipeg Manitoba, Canada. "Lead Acrylic as an Electron filter. **Request Reprint No. 333B.**
2. F.J. Bova and L.W. Hill, "Surface Doses for Acrylic Vs. Lead-Acrylic Blocking Trays for <sup>60</sup>Co, 8 MV and 17 MV Photons," *Medical Physics*, (March/April 1983). **Request Reprint No. 333C.**

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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74-387-ds rev 1 11 mar 03

# Cross-Table Universal-Angle Cassette Holder

## Model 17-412

- Permits precise angulation and elevation of cassettes
- For localizing or verifying areas treated by external beams (e.g., tangential breast, isocentric or oblique fields, and cross-table laterals)
- Easily adjusts from - 45° to + 60° angulation
- Accommodates 8 x 10, 10 x 12, and 14 x 17 inch cassettes
- Rugged, lightweight, and easily maneuverable

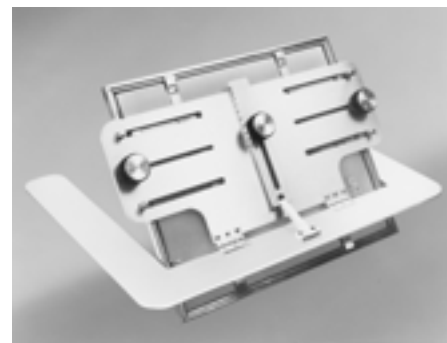
This sturdy cross-table cassette holder provides a simple, efficient means of accurately and reproducibly angulating cassettes for off-axis verification of films. Lightweight and easy-to-position, the holder accepts all standard cassette sizes and allows the cassette to be elevated for obese patients.

This versatile unit is ideal for verifying and localizing films on both simulator and teletherapy systems.

### Specifications

**Material** Aluminum

**Dimensions** 26 (w) x 18 (d) x 11 in (h)  
(63.5 x 45.72 x 27.94 cm)



**Weight** 6.5 lb (2.6 kg)

**Available model(s)**

**17-412** Cross-Table Universal-Angle Cassette Holder

# Free-Standing Universal-Angle Cassette Holder

## Model 17-413

- For portal films
- Angulations are precise, repeatable
- Sturdy, safe, and easy to maneuver
- Tilts cassette 180°
- Arm rotates the cassette 360° around the column
- Save film, time, and labor
- Reduce radiation exposure, patient discomfort, and the need for patient assistance in positioning

### Diagnostic applications

- Three-way studies of acute abdomens
- Myelograms
- Fractures where patient is immobilized
- Lateral decubitus fluid level studies of abdomen
- Operating room radiography

### Therapeutic applications

- Radiation therapy verification films (portal films)
- Localization for tangential breast, isocentric or oblique fields
- Simulation without fluoroscopy
- Implant source localization by orthogonal films

With this versatile cassette holder, x-rays can be taken at virtually any angle from floor level up to 72 inch high. It rolls or swivels easily into position on large, smooth-rolling casters. The horizontal arm telescopes 24 inch and is counterweighted for easy raising and lowering. A lip on the cassette holder allows a cassette to be inserted with one hand, if necessary. The calibration scale on both the column and arm permit precise, repeatable angulation. The cassette holder is extremely sturdy, thus ensuring safe, stable positioning.



### Specifications

#### Dimensions

**Height** 75 inch (190.5 cm)

**Base** 19 x 22 inch (48.26 x 55.88 cm)

**Weight** 110 lb (50 kg)

**Available model(s)**

**17-413** Free-Standing Universal-Angle Cassette Holder

### Operation

Drop a cassette into place against the stop, and tighten the grips. Adjust the holder visually or by using the calibration scales.

Roll the device into place and lock the casters.

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17-412-ds rev 1 26 mar 03



# Cerrobend® Dispenser

## Model 37-019



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- Maintains pre-melted cerrobend for immediate dispensing
- A true time-saver

This convenient stainless steel dispenser eliminates preparation time, by providing pre-melted, ready-to-use Cerrobend. It keeps melted Cerrobend clean, dust-free and conveniently on-tap for immediate dispensing at any desired temperature, up to 90°C. A cartridge heater keeps the faucet warm, to reduce the possibility of clogging.

### Specifications

**Capacity** 1 gal

**Power requirements** 115-120 V, 60 Hz, 500 W

**Dimensions** 14 (h) x 8.50 in (w) (35.56 x 21.59 cm)

**Weight** 12 lb (5.45 kg)

**Available model(s)**

37-019 Cerrobend Dispenser



# Body Caliper

## Model 17-601

- Quick, accurate measurements of body thickness
- Lightweight
- Graduations up to 55 cm
- Features sliding bar with locking thumbscrew

### Specifications

**Dimensions** 30.5 horizontal x 55 cm vertical

**Weight** 5 lb (2.3 kg)

**Available model(s)**

17-601 Body Caliper



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37-019-ds rev 1 11 mar 03