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healthcare for everyone

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mobileMOSFET Dosimetry

mobileMOSFET MODEL TN-RD-70W

The TN-RD-70W mobileMOSFET is a portable, easy-to-use, integrated system that simplifies dose measurements and minimizes QA time, making it ideal for a busy radiotherapy center.

- Routine in-vivo dosimetry
- Single or multiple field measurements
- Treatment plan verification
- IMRT and IGRT plan verification
- Brachytherapy and radiology applications



The MOSFET detectors feature:

- One dosimeter/calibration factor for all photon and electron modalities
- Isotropic, +2% for 360°
- 2 mm nominal width
- 0.2 x 0.2 mm active region
- microMOSFET is nominally 1 mm wide



Survey Meters

Model 451P

The Model 451P is an industrial standard survey meter featuring a pressurized ionization chamber probe, microprocessor technology, and an illuminated analog/digital liquid crystal display.

- Sensitivity to $\mu\text{R}/\text{h}$ range
- Rugged, lightweight, easy to operate



Model 14C Survey Meter

The Model 14C features an internal energy compensated detector with a 0–2000 mR/h range to satisfy the 1R/h requirement for Nuclear Medicine departments.



External Probes

Model 44-6

- Stainless steel wall G-M Detector, for beta, gamma, x-ray detection)

Model 44-7

- Thin end window G-M Detector, for alpha, beta, gamma, x-ray detection

Model 44-9

- Pancake G-M Detector, for alpha, beta, gamma, x-ray detection)



Lasers and Laser Alignments

LAP LASERS have unique optics that project crosshair lines equal in width and brightness for precision Patient Alignment:

Apollo and Astor Models

- Red and green lasers
- Internal six axis adjustments
- Angle bracket mounting



Model 9116

The Model 9116 is a multifunctional tool for the routine quality assessments of mechanical and geometrical treatment parameters of linear accelerators or teletherapy units.

- Radiation/light field congruence
- Isocenter rotational stability
- Collimator, gantry and table isocentricity
- Field size accuracy
- Optical distance indicator
- Laser light alignments



Model LAD-4 Laser Alignment Device

- A CNMC Laser Alignment Device for testing and alignment of isocentric beams. It allows for adjustments to be made by one person.



CT Chambers and Phantoms

CT Dose Probes, Models 6000-100 and 6000-200

Both probes are pencil type ionization chambers with a male BNC plus banana plug type connector. Triaxial BNC or TNC connection is available on request. The outside diameter of the 6000-200 chamber is designed to fit into existing CT dose phantoms.



Specifications	6000-100	6000-200
Sensitive length	10.0 cm	10.0 cm
Nom. Volume	3.2 cc	10 cc
Nom. Sensitivity	0.1 nC/R.cm	0.32 nC/R.cm
Chamber OD	7.4 mm	12.7 mm
Chamber wall	polystyrene	acrylic
Wall density	54 mg/cm ²	77 mg/cm ²
Phantom adapter	1.27 cm dia.	n/a

Model 007 CT Dose Phantom Set

The CT Dose Phantom is manufactured to comply with the Food and Drug Administration's performance standard for diagnostic x-ray systems, which includes Computed Tomography Systems (21CFR 1020.33).

- Material: acrylic (PMMA)
- Thickness: 4 cm (5.51 in)
- Diameter:
 - Head Dose Phantom: 16 cm (6.3 in)
 - Body Dose Phantom: 32 cm (12.6 in)
- Set Includes:
 - Head Dose Phantom with five plugs
 - Body Dose Phantom with five plugs
 - Carrying Case



Alignment and HVL Tools

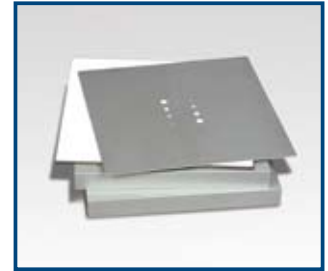
Model 144 Grid Alignment Test Tool

The Model 144 is designed to test proper grid alignment with respect to the central ray of the x-ray tube.



Model 151 Low-Resolution Test Tool

The Model 151 evaluates the system's ability to compensate for variations in patient thickness, x-ray field size, image intensifier magnification modes and other system variations.



Model 1151 Radiographic Contrast/Detail Phantom

The Model 1151 consists of an aluminum plate with a 10 by 10 matrix of holes that vary in diameter and depth. By plotting the diameter of the hole that can just be visualized vs. the depth of the hole, a contrast detail curve of the fluoroscopic system can be established.



AFS-1 Aluminum HVL Attenuator Set

- Sixteen 10 x 10 cm type 1100, 99% pure, aluminum absorbers of various thicknesses

07-434 High-Purity Aluminum HVL Attenuator Set

- Five 10 x 10 cm by 0.1 mm thick high purity, 99.99%, aluminum filters for very accurate half value layer determination

07-431 Copper HVL Attenuator Set

- Ten copper absorbers of various thicknesses for half value layer determination of 140 to 400 kVp x-ray generators



Block Cutters

Styro•former® — The Original Radiotherapy Shielding Block Mold Cutter

- Easy to use with minimal training
- Short cutting wire to eliminate bowing
- Precision alignment between the source point and block tray
- Adjustable to any treatment machine
- Power Lift Option — motors move the source point and block tray to the desired cutting distance
- NEW Power Lift LT — panel mounted controls for quick, push-button height adjustments
- Auto Boost Option — wire temperature boost to adjust for wire deflection



Compu•cutter® III — Radiotherapy Shielding Block Cutting System

- Four-axis cutter ensures accuracy of ± 1 mm
- Cut path simulation prior to actual block cut
- Digitized block outlines can be easily transferred from various treatment planning systems
- Full system for the Compu•cutter® III includes the cutter, computer, custom software, printer, digitizer and an optional label printer
- Can be purchased as a cutter and software package only, to be used with existing peripherals in any radiotherapy department to reduce expenses



Calipers and Film Holders

Calipers

Standard Body Calipers

- Width: 25.4 cm (10 in)
- Length: 52.8 cm (20.8 in)
- Measures: 0–45 cm (0–17.7 in)

Head/Neck/Mammo Body Calipers

- Width: 24.7 cm (9.75 in)
- Length: 39.1 cm (15.4 in)
- Measures: 0–25 cm (0–9.8 in)

Extended Body Calipers

- Width: 25.4 cm (10 in)
- Length: 62.3 cm (24.5 in)
- Measures: 0–55 cm (0–21.7 in)



Flexi•holder® — Versatile, Multi-Angle Film Cassette Holder

Flexi•Holder Model 303-26.5

- Rolls or swivels into position on large casters, tilts cassette and rotates the cassette vertically or horizontally, and has a 26.5 inch telescoping arm

Model 303-36

- Identical in construction and features to the 303-26.5, but with a 36 inch telescoping arm



FH-303 series cassette plate



Flexi•holder® FH-410 clamps with Agfa® digital cassette



Alloy Dispensers and Alloy

Alloy Dispenser

The low melting alloy dispensers are made of stainless steel with an easy-to-remove cast aluminum base. The electronic thermostat ranges from 100–200° F for 158° F alloy model, and 140–250° F for 203° F alloy models. 1.5 and 3.0 gallon capacities.



Shielding Alloy

Alloy #158

- 50.0% Bismuth, 26.7% Lead, 13.3% Tin, 10.0% Cadmium, melts at 158° F

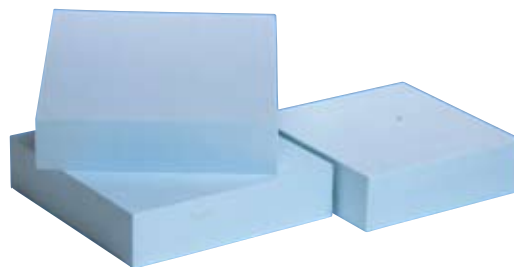
Alloy #203

- 52.2% Bismuth, 32.0% Lead, 15.5% Tin, 0.0% Cadmium, melts at 203° F



Foam Blocks

- Our medium density, medical grade foam blocks have a smooth finish for easy release.



Ask about our radiotherapy accessories and complete “Mold Room Kits” including hot plate with rheostat, stainless pitcher, cooling tray, alloy #158, foam blocks, masking tape, Lexan trays, thermometer and mold release.

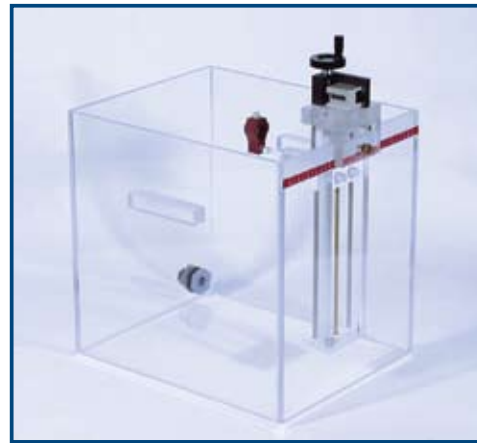


Calibration Water Phantom

CNMC WP-3040 and WP-3840 Water Phantoms

The CNMC WP-3040 and WP-3840 are calibration-grade water phantoms with a convenient-to-use manual ion chamber depth positioning system. The water tanks are constructed of 3/8 inch acrylic, have side-mounted handles for easy transport, and have a drain with a ball valve.

- Precision tank construction
- Compatible with TG-51 protocol
- Depth precision is 0.1 mm
- Optional remote motor drive
- Side-mounted handles for easy transport



CNMC Model RMD-100-5 Remote Motor Drive

- Check dose distributions in sensitive areas
- Measure absolute dose in multiple locations
- Test and compare various dose measurement devices for thorough analysis of the IMRT system



Left: Motor drive assembled to the depth drive
Right: Remote control/display module



Calibration, Repair and Modification Services

CNMC ADCL Calibration Services

When you schedule your system for calibration through CNMC, we will thoroughly inspect your dosimeter, ion chamber and extension cable, and report on conditions requiring attention. This service is provided to you at no additional charge.

CNMC will then schedule your equipment to be calibrated at an AAPM ADCL:

- K&S Associates, Inc.
- University of Texas MD Anderson Cancer Center
- University of Wisconsin

Dosimeter Modifications

CNMC can modify and significantly improve the following dosimeters:

- Keithley 614 and 602
- Capintec 192
- Victoreen 500

Dosimeter Repair

CNMC can generally repair and significantly improve your dosimeter/electrometer regardless of the manufacturer. Repairs at half the cost and half the turn-around time are common at CNMC.

Ion Chamber Repair

Same day repairs are possible at CNMC — typical chamber repairs include:

- Thimble replacement (non-waterproof types)
- Connector repair or replacement
- Correcting leakage condition
- Resheating waterproof ion chambers

Dosimeter Repair

CNMC manufactures custom lengths of low-noise triaxial or coaxial cables with your choice of connectors. CNMC will repair or modify your extension cable. Repairs and modifications include:

- Connector repair or replacement
- Conversion of any style connector: BNC, TNC, PTW-M, MDH, etc.
- Installation in a cable reel

