

Long term reputation in the medical industry.

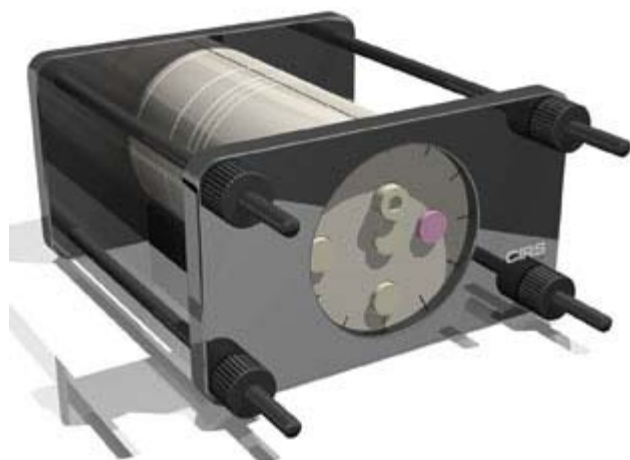
Assurance we will offer competitive pricing.

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LACO Inc.

can do it all!



IMRT Phantom Head and Neck

Complete QA from CT imaging to dose verification

The CIRS Model 002HN IMRT phantom is designed to address the complex issues surrounding commissioning and comparison of treatment planning systems and verification of individual patient plans and delivery.

The CIRS 002HN phantom properly represents human head and neck anatomy in shape, proportion and structure as well as density. This enables thorough analysis of both the treatment planning and delivery systems. The phantom is manufactured from unique proprietary materials that faithfully mimic bone and water within 1% from 50 keV to 25 MeV.

The phantom is circular in shape, approximates the size of an average patient. Tissue equivalent interchangeable rod inserts for ionization chambers allow for point dose measurements in multiple planes in the phantom and film calibration. The phantom also supports film dosimetry with not only standard radiographic films but also Gaf-Chromic® radiographic films but also Gaf-Chromic® media. Optional inserts are available to support a variety of other detectors including TLD's, MOSFET, and diodes.

The Model 002HN accommodates one Ready Pack™ 10" x 12" films in transverse orientation, two radiochromic or radiographic 10 x 10 cm films in transverse orientation and a stack of thirteen radiochromic films precut to 63.5 x 63.5 mm in three different orientations.

The Model 002HN includes five different Electron Density reference plugs which can be interchanged in five separate locations within the phantom. The surface of the phantom is etched with grooves to ensure proper orientation of the CT slices and accurate film orientation of the CT slices and accurate film to plan registration. An optional cranial bone ring is also available.

Phantom Benefits

- verify heterogeneity corrections
- correlate CTU to electron density
- check dose distributions in sensitive areas
- check depth doses and absolute dose
- 2D and 3D isodoses
- verify individual patient treatment plans
- calibrate film with ion chamber