

Model 9116 Isocentric Beam Checker II

The Model 9116 multifunctional Isocentric Beam Checker II (IBC II) is a precision quality assurance tool for daily, weekly or monthly quality assessments of all mechanical and geometrical treatment parameters of linear accelerators or teletherapy units.

The IBC II is designed to easily and accurately check collimator isocentricity, gantry isocentricity, table isocentricity, collimator field size accuracy, radiation/light field congruence, isocenter rotational stability, ODI accuracy and laser light alignments.

It consists of a large opaque acrylic screen backed by a secondary plate, both supported by an acrylic base and side supports. The screen is inscribed with lines precisely defining the corners, edges and center of the screen's 2 mm x 2 mm, 5 cm x 5 cm, 10 cm x 10 cm, 15 cm x 15 cm and 20 cm x 20 cm fields. Intersecting center lines are inscribed with short lines spaced 1 cm apart. The screen can rotate about its axis in increments of 45°. Tungsten markers of 2 mm diameter are imbedded in the center and corners of the fields. A ten inch by twelve inch ready-pack film can be sandwiched between the two plates. When exposed, the tungsten markers project a sharp image on the film eliminating inaccuracy and the need of pricking holes into the film. To rotate the screen, simply hold both left and right knobs together while turning them simultaneously. When turned 45°, the screen seats itself accurately and automatically; thus repositioning is accomplished easily and quickly.

The base features non-slip 3-point leveling pads and a bubble level, allowing it to be set up for use quickly and conveniently. The Isocentric Beam Checker II is shipped fully assembled.



Features:

- ▶ Radiation/light field congruence
- ▶ Collimator isocentricity
- ▶ Collimator field size accuracy
- ▶ Isocenter rotational stability
- ▶ Gantry isocentricity
- ▶ Table isocentricity
- ▶ Optical distance indicator
- ▶ Laser light alignments

Specifications

Overall Dimensions

Width:	20.3 cm (8 in)
Length:	45.7 cm (18 in)
Height:	33 cm (13 in)
Screen dimensions:	30.5 x 30.5 cm (12 x 12 in)
Rotation:	360° in 45° increments
Field sizes:	2 mm x 2 mm, 5 cm x 5 cm, 10 cm x 10 cm 15 cm x 15 cm, 20 cm x 20 cm
Positioning:	self seating
Leveling:	3-point with bubble level
Materials:	white acrylic and clear acrylic
Markers:	tungsten spheres, 2 mm diameter
Film used:	10 x 12 inch ready-pack
Weight:	2.9 kg (6.4 lb)