

X-Ray Test Tools

151 Low-Resolution Test Tool

An Automatic Brightness Control (ABC) for fluoroscopy compensates for variation in patient thickness, x-ray field size, image intensifier magnification modes, and other variations of the system. The Model 151 Low-Contrast Resolution Test Tool evaluates the system's ability to compensate for these variations while maintaining good contrast and detail.

The Model 151 consists of two aluminum blocks, one lead blocker and an aluminum resolution plate with two sets of decreasing diameter holes. Other tests performed are table top exposure rate in R/min for fluoro units and the phototimer performance of spot film devices.

Specifications

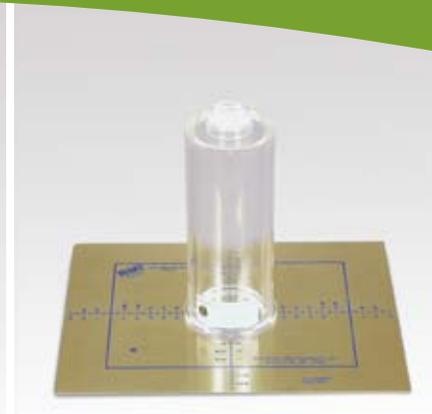
Dimensions: 18 x 18 x 4.5 cm (7 x 7 x 1.8 in)
Weight: 4 kg (8.8 lbs)

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. Grid misalignments, such as lateral decentering or tilting of the grid, are not easily recognized and can have an effect on image contrast as well as increasing patient dose. These types of misalignments can only be detected through regular quality control testing with the Model 144.

Specifications

Construction: On lead blocker, 9 x 23 cm, with precise hole locations; Two small lead blockers
Weight: 0.7 kg (1.5 lbs)



Clockwise from left:
Model 144 Grid Alignment Test Tool; 161B Collimator Test Tool & 162A Beam Alignment Test Tool; Model 151 Low Resolution Test Tool



161B Collimator Test Tool 162A Beam Alignment Test Tool

The Model 161B is designed to evaluate the collimator light field and x-ray field congruence. It is constructed of brass so that centimeter etchings on its surface can give a direct ruled dimension on the radiograph. It is calibrated to show misalignments to within 0.5 cm.

The Model 162A provides a simple test of the x-ray beam's alignment. When used with the Model 161B, misalignments of 1% and 2% can be visualized. It is constructed as a plastic cylinder with one steel ball at each end. If everything is in alignment, the steel balls will be superimposed on the radiograph.

Specifications

161B Collimator Test Tool:
Construction: etched brass
Dimensions: 20 x 25 cm (8 x 10 in)
Weight: 200 g (6.2 oz)

162A Beam Alignment Test Tool:
Construction: acrylic cylinder
Dimensions: 7 cm dia., 16 cm high (2.8 x 6.3 in)
Weight: 260 g (9.2 oz)