

## Radiographic Survey Phantom

### GAMMEX 170NJ

The Gammex 170NJ phantom provides a simple and reproducible test tool for inter-facility surveys and intra-department comparison of radiographic systems. For routine quality control, the phantom images provide a rapid assessment of high contrast resolution, low contrast detectability, radiographic exposure consistency as well as radiation light-field alignment and collimation accuracy. The phantom is designed for use in three ranges of clinical settings: extremity (no copper plates) in the range of 60 kVp, abdomen or lumbar spine (with 2.4 mm Cu

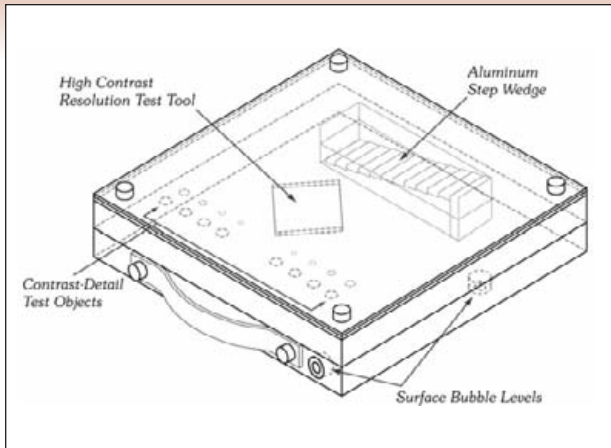
plate) in the range of 75 kVp, and chest (with 2.0 mm Cu plate) in the range of 120 kVp.

Specified for use by health physicists performing routine inspection, the Gammex 170NJ is designed with features to optimize portability and ease of use. Each phantom is equipped with a carrying strap, tripod mounting assembly and built-in levels for quick set up, and orientation in the variety of clinical settings encountered by inspection teams and consultants.





continued from front...



## SPECIFICATIONS

### Phantom Base Material

- (2) . . . . . acrylic blocks 3.9x3.9x.78 cm (10x10x2 in) assembled
- (1) . . . . . 2.0 mm Cu plate, 3.9x3.9 cm (10x10 in)
- (1) . . . . . 2.4 mm Cu plate, 3.9x3.9 cm (10x10 in)

### Imbedded Test Objects

Gammex 117 Aluminum step wedge  
11 steps; Dimensions: 5.5x1.5x1.37 in,  
step depth 0.5 in, step height 0.125 in

High contrast resolution test tool  
20 line pairs from 0.6 lp/mm to 10 lp/mm

Contrast-detail test objects  
Eight holes of 0.375 in diameter with decreasing depths of: 0.006, 0.009, 0.013, 0.018, 0.025, 0.035, 0.049, 0.068 in  
Tolerance  $\pm 0.0020$  in  
Two sets of four holes of 0.068 in depth with decreasing diameters of: 0.2, 0.15, 0.1, 0.08 in  
Tolerance  $\pm 0.0020$  in

Alignment and Orientation Markers  
Four corner markers for light field alignment  
Top edge lead reference line for film orientation  
Point alignment marker, 0.08 in diameter, 0.75 in deep  
Top and front surface bubble levels

Ergonomic Features  
Carrying strap  
Thread for tripod mounting  
Thumb screw fasteners for attaching copper attenuation plates.