

## Perma-Doc Phantoms

An autoradiographic Ir-192 HDR Quality Assurance device compatible with any of today's remote afterloaders

### Features:

- ▶ Verifies source positioning and stepping accuracy
- ▶ Images centimeter scale directly on film
- ▶ Requires single exposure only
- ▶ Set-up accomplished in seconds
- ▶ Eliminates all guesswork
- ▶ Precision built
- ▶ Compatible with all HDR units
- ▶ Fulfills documentary QA requirements

According to U.S. Code of Federal Regulation 10 CFR 35.633, source positioning accuracy on remote afterloading units is to be within  $\pm 1$  mm. Additionally, it is highly recommended to check source positioning accuracy daily or prior to HDR treatments.

The Perma-Doc Phantoms provide the necessary permanent documentation required by the NRC's new and stringent quality assurance tests associated with HDR. The Perma-Doc Phantom, with its centimeter scale automatically transferred to the film by fluorescent radiation, readily identifies up to 20 source positions and their stepping accuracy.

### 9404 PermaDoc Phantoms usable with 10 x 12 in ReadyPack film

The device consists of two matching 0.375 in acrylic plates that allow insertion of a 10 in x 12 in ready-pack film. The film is compressed four thumbscrews before exposure to the HDR Ir-192 source with dwell times of 1-2 seconds over a maximum of 20 positions spaced 1 cm apart. The resulting developed film displays the source images superimposed on the image of the centimeter scale.



### Specify:

Model 9404-VS ..... for use with Varisource HDR  
 Model 9404-GM ..... for use with Gammamed 12i(t) HDR  
 Model 9404-GM Plus ..... for use with Gammamed Plus HDR  
 Model 9404-MS ..... for use with Micro Selectron HDR

### 0607 PermaDoc-GC Phantoms usable with Gafchromic RTQA film

The device consists of two 4 in x 13 in acrylic plates stacked on top of each other, with two locating pins to assure alignment and four thumbscrews for compression. Four embedded spring-loaded ball plungers separate the plates for easy insertion of the film. A 3 mm diameter groove is provided for insertion of a straight tandem. A metric ruler is attached below the tandem to assist in setting the tandem to the calibrated position. A thumbscrew keeps the tandem securely in place.

The test consists of 3 easy steps:

1. Insert Gafchromic RTQA-111 film strip
2. Attach the source transfer tube
3. Expose to HDR Ir-192 source

Due to self developing attribute of Gafchromic film, the need to visit the darkroom is eliminated. The test results in immediate display of the source images superimposed on the image of the centimeter scale.

### Specify:

Model 0607-VS ..... for use with Varisource HDR  
 Model 0607-GM ..... for use with Gammamed 12i(t) HDR  
 Model 0607-GM Plus ..... for use with Gammamed Plus HDR  
 Model 0607-MS ..... for use with Micro Selectron HDR