

**4732.0820 GENERAL PURPOSE DIAGNOSTIC RADIATION-PRODUCING EQUIPMENT MANUFACTURED BEFORE 1973.**

Subpart 1. **Applicability.** Diagnostic radiation-producing equipment in veterinary facilities or equipment manufactured before 1973 must meet the requirements of the manufacturer's specifications or the requirements in this part in addition to other requirements in this chapter.

Subp. 2. **Beam limitation.** The useful beam must be limited to the patient's area of clinical interest.

A. Means must be provided to limit the x-ray field in the plane of the image receptor so the field does not exceed each dimension of the image receptor by more than two percent of the SID when the axis of the x-ray beam is perpendicular to the plane of the image receptor.

B. Means must be provided to align the center of the x-ray field with the center of the image receptor to within two percent of the SID, or means must be provided to align the x-ray field so the x-ray field at the plane of the image receptor does not extend beyond any edge of the image receptor.

C. The requirements of items A and B may be met with either:

(1) an assortment of removable, fixed-aperture, beam-limiting devices sufficient to meet the requirement for each combination of image receptor size and SID for which the system is designed with each device having clear and permanent markings to indicate the image receptor size and SID for which it is designed; or

(2) a beam-limiting device having multiple fixed apertures sufficient to meet the requirement for each combination of image receptor size and SID for which the system is designed. Permanent, clearly legible markings must indicate the image receptor size and SID for which each aperture is designed and must indicate which aperture is in position for use.

Subp. 3. **X-ray control console.**

A. All x-ray control console panel indicator lights must be operational.

B. The x-ray control console must provide visual indication observable at or from the operator's protected position whenever x-rays are produced.

C. The x-ray control console must provide a signal audible to the operator that the exposure has terminated.

Subp. 4. **Beam quality half-value layer.** The requirements for half-value layer found in part 4732.0800, subpart 6, must be met.

**Statutory Authority:** *MS s 144.12*

**History:** *32 SR 777*

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