

Cobalt-60 source projectors

741 series, 680 series



**SENTINEL Cobalt-60
source projectors**
code TEN741
code TENB741 (with Posilok)
code TEN680
code TENB680 (with Posilok)

Source projectors combining the penetrating radiation of cobalt-60 and the mobility provided by the use of depleted uranium shielding. All components have been developed to provide safe, reliable service and long life under the harsh conditions of industrial use and the durable case is designed to ease rigging operations. All projectors are available with or without Posilok.

Features

Reliable simplicity

The time-proven 'S tube' design which combines optimum shielding with the minimum of moving parts.

Self-contained

No external power supply is required.

Safety

A lock is incorporated to prevent use by unauthorized personnel. The source cannot be projected until the control cable is correctly connected. The projector cannot be locked or the control cable disconnected until the source is safely stored. Projectors with codes that include the letter B are fitted with the unique Posilok device which automatically locks the source assembly into the stored position on retraction.

Low surface dose rate

Well below the maximum allowed under I.A.E.A. and U.S.N.R.C. regulations. The Posilok meets ANSI N 432 (1980) and the 10.CFR Part 34 requirements.

Good radiation protection

The long control cables allow the operator to control the source at a distance of 7.6m (25ft). When the source is in the exposure position the control can be at a distance of 14m (46ft). Longer control cables and source guide tubes are available to special order.

Easily shipped

The projector is a certified Type B(U) container and can be shipped loaded under I.A.E.A. and U.S.N.R.C. transport regulations.

Easily positioned

The source can easily be positioned by means of the flexible source guide tubes and source positioning devices. The exposure snout will pass through a 19mm (3/4in) diameter hole.

Panoramic or directional beam

An optional range of collimators provide for panoramic or directional beam.

The system

SENTINEL Cobalt-60 projectors

code TEN741, TEN680 series

Simply select your projector and the appropriate system from this list. Add a collimator if required.

7·6m (25ft) Reel type control and accessories

10·7m (35ft) Reel type control and accessories

15·2m (50ft) Reel type control and accessories

7·6m (25ft) Pistol grip control and accessories

7·6m (25ft) Pistol grip control and accessories (without odometer)

SENTINEL systems consist of either a reel type control or a pistol grip control with or without odometer, plus 2 x 2·1m (7ft) guide tubes, 1 x 2·1m (7ft) guide tube with permanent fixed stop and a source positioning kit.

Individual components should be ordered as required.

The source projector cart code TEN706 is available separately.

Source assembly (ordered separately)

Details of sources are available separately.

SENTINEL Cobalt-60 projectors

code TEN741

code TENB741 (with Posilok)

code TEN680

code TENB680 (with Posilok)

Specifications

Isotope

Cobalt-60.

Half life

5·27 years.

Application

Radiography of steel from 25 to 175mm (1 to 7in) thick and light alloys 75 to 375mm (3 to 15in) thick.

TENB741/TEN741

Maximum capacity

Nominal equivalent activity 1·21 TBq (33Ci).

Shielding materials

Depleted uranium metal, weight 91kg (225lb).

Dimensions

Length: 480mm (19in).

Width: 360mm (14in).

Height: 289mm (11 $\frac{1}{8}$ in).

Weight: 154kg (340lb).

Packaging

Packaging certificate number USA/9027/B(U).

TENB680/TEN680

Maximum capacity

Nominal equivalent activity 4·07 TBq (110Ci).

Shielding material

Depleted uranium metal, weight 130kg (295lb).

Dimensions

Length: 530mm (21in).

Width: 380mm (14 $\frac{3}{4}$ in).

Height: 303mm (12in).

Weight: 204kg (450lb).

Packaging

Packaging certificate number USA/9035/B(U).