



## GammaMat® TSI/1

### GammaMat TSI/1 Specifications

#### Basic Construction Standards

DIN 45115 part 4 and ISO 3999:2000, class P, category 2

#### Isotope

Ir-192 in special form half-life: 73.8 days

#### Activity

TSI 3/1: 3.00 TBq (80 Ci)  
TSI 5/1: 5.00 TBq (135 Ci)

#### Does Rate at the Surface

Max. 2 mSv/h

#### Applicable Temperature Range

-40°C up to +50°C  
Exceeding ISO 3999:2000, 5.1.4

#### Depleted Uranium Weight

TSI 3/1: 10.9 kg (24 lb)  
TSI 5/1: 13.0 kg (28.4 lb)

#### Overall Dimensions

Length: 350 mm (13" 3/4)  
Width: 132 mm (5" 3/4)  
Height: 222 mm (8" 3/4)

#### Material Used

Outer shell: CrNi steel,  
Aluminum casting

#### Shielding

Depleted Uranium Max. 0.4% U-235  
(Specific activity < 18.50 MGq/kg)

#### Accessories

Remote controls: 5, 10, 15 m  
(5.5, 11, 16 yd)  
Guide tubes: 1, 2, 3, 5 and 10 m  
Collimators: 60°, 90° and 360°

### Available Models

Model	Max Loading	Total Weight
TSI 3/1	3.00 TBq (80 Ci) Ir-192	20.0 kg (44.0 lb)
TSI 5/1	5.00 TBq (135 Ci) Ir-192	22.0 kg (48.4 lb)

### Compact, Lightweight Ir-192 Gamma Ray Projector

The GammaMat TSI/1 is the latest model in the GammaMat Series. It is the product of many years of development of gamma radiography devices for the universal application of Ir-192 sources. It incorporates a straight source channel, and a completely new, patented radiation labyrinth made of tungsten. The GammaMat TSI/1 uses no uranium moving parts, and it is smaller and lighter than the conventional S-channel devices. The GammaMat TSI/1 meets all the requirements of the ISO 3999:2000 standards.

### Unparalleled Safety

A green/red indicator shows whether the source is in the safe position. This indicator is easily visible, even from a distance. The automated source securing mechanism of the GammaMat TSI/1 does more than detect the return of the source holder into the unit, it checks the arrival of the source capsule into its safe position.

### Safe

The GammaMat TSI/1 self-shielding link-type source holder and patented radiation labyrinth keep radiation far below 2 mSv/h at the front and back ends of the source channel. The GammaMat TSI/1 is the only device to incorporate a real source position indicator. The source holder can only be released if the remote control and the source guide tube are properly connected. When in the retracted position, the source holder is automatically locked and the source is shielded.

### Regulatory Approvals

The GammaMat TSI/1 is type B(U) approved and satisfies all the requirements of the ISO 3999:2000, ANSI N43.9, N432 (United States) and DIN 54115 (Germany).



[www.agiris-ndt.com](http://www.agiris-ndt.com)

**Belgium**

MDS Nordion S.A.  
Zoning Industriel  
Avenue de l'Espérance  
B-6220 Fleurus, Belgium  
Tel: +32 71 82 35 71  
Fax: +32 71 82 36 71  
[supportsources@mds.nordion.be](mailto:supportsources@mds.nordion.be)

**Canada**

MDS Nordion  
447 March Road  
Ottawa, ON, Canada K2K 1X8  
Tel: +1 613 592 2790  
Fax: +1 613 592 6937  
[www.mdsnordion.com](http://www.mdsnordion.com)