

Iridium Sources

192

The ARI range of sources cater for most industrial applications using gamma radiography. The choice of isotopes provides for the widely varying requirements demanded by different materials and site conditions. Sources with outputs ranging from less than one curie.



Product Code: IR2R2

Iridium-192 Radiography Source

Active Dia: 2 mm

Active Height: 2 mm

Nominal Activity: 32 Ci (1200 GBq)

FOB Sydney

Characteristics

Optimum Working Thickness:

- Steel - 12.5 to 62.5 mm
- Light Alloys - 40 to 190 mm
- Other materials - 0.1 to 0.5 g/mm²

Half life: 74.0 days

Principal gamma Energies:

0.206 to 0.612 MeV

Output at 1 meter for an equivalent activity of 37 GBq (1 Curie)

Exposure rate: 0.48 R/h. Air kerma rate: 1.164 μ Gy/s

Supplied from: Sydney, Australia

Product Code: IR2R32

Iridium-192 Radiography Source

Active Dia: 3 mm

Active Height: 2 mm

Nominal Activity: 54 Ci (2000 GBq)

Sydney

Product Code: IR2R3

Iridium-192 Radiography Source

Active Dia: 3 mm

Active Height: 3 mm

Nominal Activity: 73 Ci (2700 GBq)

FOB Sydney

Iridium-192 spectrum - Electromagnetic transitions

| Photon energy MeV | Transition probability |
|-------------------|------------------------|
| 0.201 | 0.4% |
| 0.206 | 3.4% |
| 0.283 | 0.3% |
| 0.296 | 29.6% |
| 0.308 | 30.7% |
| 0.316 | 82.7% |
| 0.374 | 0.7% |
| 0.416 | 0.6% |
| 0.468 | 47.0% |
| 0.484 | 2.9% |
| 0.489 | 0.3% |
| 0.589 | 4.4% |
| 0.604 | 8.2% |
| 0.612 | 5.3% |
| 0.884 | 0.3% |
| 1.062 | 0.05% |