High-Activity Radioactive Source Production



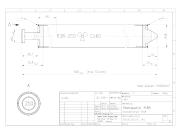
for gamma sterilization facilities, research irradiators and medical devices

Gamma-Service Recycling GmbH (GSR) has been a global market player in sealed source production since 1998. The company owns several special form certificates for Co-60 and Cs-137 sources and can deliver other isotopes upon request. GSR provides flexible production of these sources in its facility in Germany and at a second site in the Czech Republic. Furthermore, it offers surrounding services such as source transport, installation, maintenance, calibration and validation.

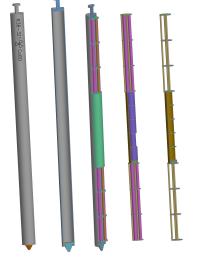
High-Activity Radioactive Sources

Co-60 sources

- Co-60 sources for industrial use
- Max. activity: 1.480 TBq / 40.000 Ci
- Max. diameter: 44.5 mm
- Max. length: 703 mm
- Dimensions according to customer request
- Standard size Co-60 sources for sterilization plants
- Co-60 sources for teletherapy use
- Co-60 sources for non-destructive testing (NDT)



Industrial source type R38 with Co-60



Manufacturer: **Gamma-Service Recycling GmbH** Bautzner Straße 67A 04347 Leipzig Germany

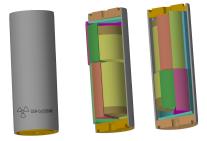
Phone: +49 341 46372-500 Fax: +49 341 46372-522 E-mail: gsr-contact@ezag.com www.gamma-recycling.de



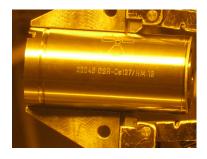
High-Activity Radioactive Source Production

Cs-137 sources

- Cs-137 sources for blood and research irradiation devices
- Cs-137 sources for calibration devices
- Cs-137 sources for other purposes on customer request
- Dimensions according to customer request
- Diameters from 23 mm to 44.5 mm
- Max. Length: 350 mm
- Activity from 1 TBq to 222 TBq
- Special form encapsulation of disused sources



Industrial source type B with Cs-137



Industrial source type with Cs-137

Own Production Facilities (Hot Cells)

Technical data

- 3 connected Hot Cells for sealed sources (Co-60, Cs-137)
- Cs-137 and Co-60 production in parallel
- 6 PBq / 162.000 Ci per cell
- 1.2m thick shielding walls made of baryte concrete
- 6 cranes (indoor crane 20t, active storage 10t, maintenance aisle 10t, 3x incell crane 1t)
- Use of an electric remote controlled heavy duty mover for container transport

Production conditions

- State-of-the-art equipment
- Full control over production processes and schedules
- Direct access to wet and dry storage
- Fully equipped workshop at GSR branch in Dresden, Germany
- Development of new source formats for additional applications



Hot cell - complete facility



Hot cell - inside view (opposite side)