



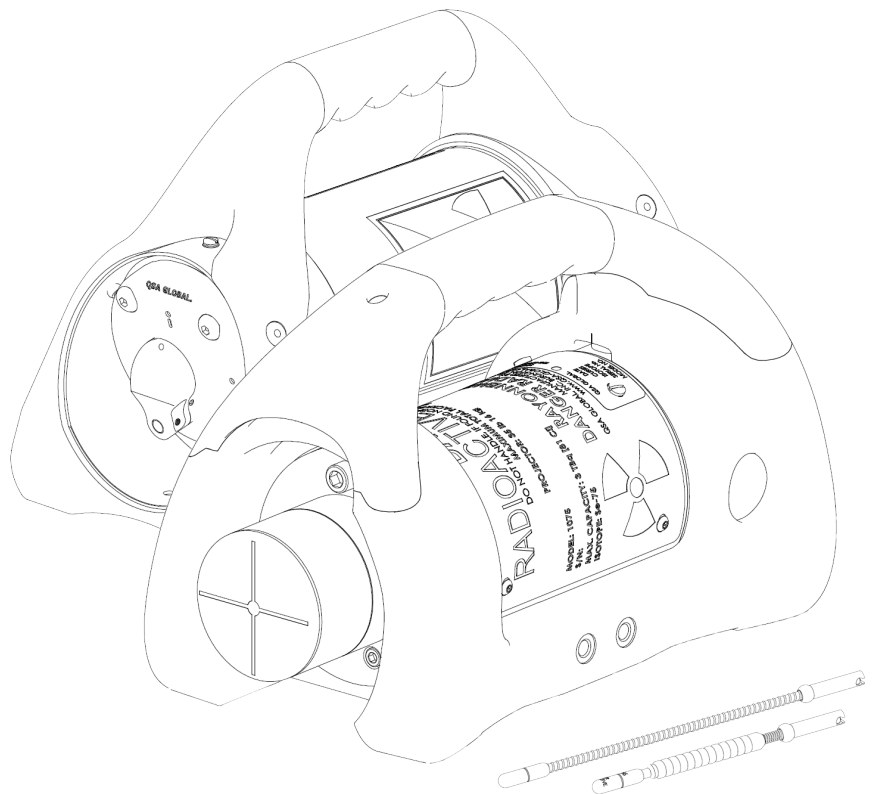
## SENTINEL™ SELENIUM-75 INDUSTRIAL RADIOISOTOPES.

QSA Global, Inc.'s SENTINEL Se-75 radioisotope sources are double-encapsulated\* and sealed using laser welding for superior quality and safety. Radioisotope sources contain a quasi-spherical metallic pellet for the smallest possible focal dimension which minimizes Source-Film-Distance (SFD) and heightens sensitivity on fixed geometries.

Safety is our top priority. QSA Global, Inc. radioisotope sources are made of a selenium metal alloy contained in a vanadium capsule producing the highest possible thermal stability combined with physical strength and durability compared to commonly used elemental Se-75.

Our SENTINEL Se-75 radioisotope sources are available in maximum focal sizes ranging from 1.0 to 3.5 mm and with typical nominal activities up to 90 Ci (3.33 TBq).

\* Select Se-75 sources are single-encapsulated



# SPECIFICATIONS

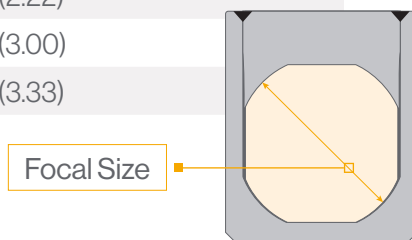
## GAMMA-RAY SOURCE PROJECTORS

Device	Assembly Number	Max Capacity Ci (TBq)
SENTINEL 1075 SCARPro	A425-6	81 (3.00)
SENTINEL 880 Series Delta	A424-25W	150 (5.55)
SENTINEL 880 Series Elite	A424-25W	150 (5.55)
SENTINEL 880 Series Omega	A424-25W	80 (2.96)
SENTINEL 959M SCAR	X540/1	81 (3.00)
SENTINEL 989 SCAR	X540/1	20 (740 GBq)
Gammamat SE	8745E	81 (3.00)

## TECHNICAL SPECIFICATIONS

Focal Sizes mm	Nominal Activities Ci (TBq)
1*	4 (148 GBq)
1.4*	8 (296 GBq)
2	20 (740 GBq)
2.5	35 (1.30)
2.85	50 (1.85)
2.85	60 (2.22)
3.25	80 (3.00)
3.25	90 (3.33)

\*Right circular cylinder focal



## SELECTED ATTENUATION DATA

Material	Material Density g/cm <sup>3</sup>	Half-Value Thickness in (mm)
Aluminum	2.65	1.100 (27.0)
Steel	7.80	0.315 (8.0)
Lead	11.34	0.039 (1.0)
Tungsten	17.80	0.032 (0.8)

## TRANSPORTING ISOTOPES

QSA Global, Inc. distributes radioisotope sources worldwide by utilizing the industry's largest fleet of source changers. Source changers are available to deliver a single source up to ten sources in a container for device reloads at your facility or at one of QSA Global, Inc.'s authorized service centers.

## LOADING & UNLOADING

QSA Global, Inc. offers a variety of options for SENTINEL Se-75 source changes to minimize downtime of your assets. QSA Global, Inc. and our authorized distributors can reload your SENTINEL Se-75 device at local facilities around the world by trained technicians or sources can be delivered directly to your facility for reload by your trained technicians.

## Se-75 PROPERTIES

Gamma Energy Range	66 - 401 keV
Steel Thickness	0.20 - 1.57 in (5 - 40 mm)
Aluminum/Titanium	1.4 - 4.7 in (35 - 120 mm)
Isotope Output at 1 meter per Curie (37 GBq)	0.203 R/hr (2.03 mSv/hr)
Isotope Output at 1 foot per Curie (37 GBq)	2.2 R/hr (22.0 mSv/hr)
Selenium-75 Half-Life	120 days
Special Form Certifications	USA/0502/S-96 USA/0335/S-96 USA/0805/S-96

For more information  
visit us at  
[qsa-global.com](http://qsa-global.com)