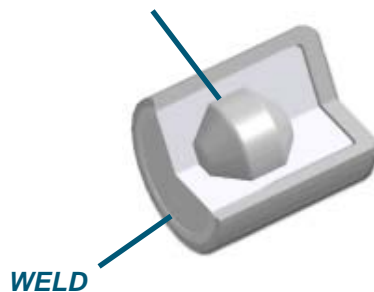


# Selenium-75 Sources and Source Holders

Selenium-75 sources are available in cylindrical and quasi-spherical focals, permitting shorter SFDs and greater sensitivity on fixed geometries.

- Ideal for controlling the size of the exclusion zone during radiographic exposures at congested work sites
- Optimizes image contrast on radiographic films while lower energy photons provide a better response on storage phosphor plates
- Provides the needed accessibility in fabrications that x-ray generators cannot access

**SELENIUM-75 METAL SELENIDE PELLET IN VANADIUM INNER CAPSULE**



## Quasi-Spherical Focal

The active focal of the sources are octagon shaped in the range of 1.4 mm to 3.5 mm (maximum focal) to maximize the output in all directions of use while minimizing the focal spot size.

Sources are available in cylindrical and quasi-spherical focals. Compared to a right circular cylinder focal, the unique focal (quasi-spherical) of the Se-75 permits shorter SFDs and greater sensitivity on fixed geometries.

Testing of the metallic selenide sources demonstrates a high degree of thermal safety and material stability.

## Applications

- Off shore oil rigs and outages at power generation plants where exposure to non-occupational workers (members of the public) is a problem
- Self propelled pipeline crawlers (QSA Global, Inc. Model 979) and directional beam exposure devices used to perform panoramic exposures of pipelines with inner diameters down to three inches (77 mm)
- Source assemblies: The Model A424-25W is available for QSA Global, Inc. Model 880 and 660 series exposure devices. Model X540-1 source holders are available for the Model 959 and 959M devices and the Model 979 mini pipeline crawler.

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All goods and services are sold subject to the terms and conditions of QSA Global, Inc. A copy of these terms and conditions is available upon request.

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All brand names and product names where used are acknowledged to be trademarks of their respective holders.

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## TECHNICAL SPECIFICATIONS

PELLET DIAMETER	MAXIMUM FOCAL SIZES	NOMINAL ACTIVITIES
1 mm*	1.4 mm*	4 Ci (148 GBq)
1.4 mm*	1.9 mm*	8 Ci (296 GBq)
2 mm	2.2 mm	20 Ci (740 GBq)
2.5 mm	2.7 mm	40 Ci (1.48 TBq)
2.85 mm	3.1 mm	60 Ci (2.22 TBq)
3.25 mm	3.5 mm	80 Ci (3.00 TBq)

## HALF VALUE AND THICKNESS VALUE LAYERS

METAL	HVL	TVL
Aluminum	27 mm	80 mm
Steel	8 mm	27.5 mm
Lead	1 mm	4.75 mm
Tungsten	.8 mm	4 mm
Concrete	30 mm	90 mm

## CERTIFICATION

Special Form Certification Number USA/0502/S

\*Right circular cylinder focal

## SOURCE HOLDERS

Source holders offered by SENTINEL™ include a comprehensive choice of designs which match original equipment manufacturer specifications and are fully compatible with most current makes of gamma radiography projector.

