



U.S. Department  
of Transportation

Pipeline and  
Hazardous Materials  
Safety Administration

East Building, PHH-23  
1200 New Jersey Ave, SE  
Washington, D.C. 20590

IAEA CERTIFICATE OF COMPETENT AUTHORITY  
SPECIAL FORM RADIOACTIVE MATERIALS

CERTIFICATE USA/0619/S-96, REVISION 10

This certifies that the sources described have been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency<sup>1</sup> and the United States of America<sup>2</sup> for the transport of radioactive material.

1. Source Identification - QSA Global, Inc. Model Numbers XN146, AXN146, and XN146/2 (All models manufactured on or after February 27, 1981).
2. Source Description - Cylindrical single encapsulations made of stainless steel with a stainless steel end cap and tungsten inert gas or laser seal welded. Approximate outer dimensions are 6.1 mm (0.24 in.) in diameter and 7.2 mm (0.28 in.) in length. Minimum wall thickness is 0.65 mm (0.026 in.). Construction shall be in accordance with attached QSA Global, Inc. Drawing No. RBA10623, Rev. E.
3. Radioactive Contents - No more than either 3.7 GBq (0.1 Ci) of Americium-241 or 18.5 GBq (0.5 Ci) of Californium-252. The Am-241 is in oxide form and mixed with a beryllium powder and pressed into a solid pellet. The Cf-252 is in the form of an oxide pressed into a pellet, a solid metal wire, or a ceramic.
4. Management System Activities - Records of Management System activities required by Paragraph 306 of the IAEA regulations shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors in the United States exporting shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.

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<sup>1</sup> "Regulations for the Safe Transport of Radioactive Material, 2012 Edition, No. SSR-6" published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

<sup>2</sup> Title 49, Code of Federal Regulations, Parts 100-199, United States of America.

**CERTIFICATE USA/0619/S-96, REVISION 10**


5. Expiration Date - This certificate expires on November 30, 2026. Previous editions which have not reached their expiration date may continue to be used.

This certificate is issued in accordance with paragraph(s) 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the October 26, 2021 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:

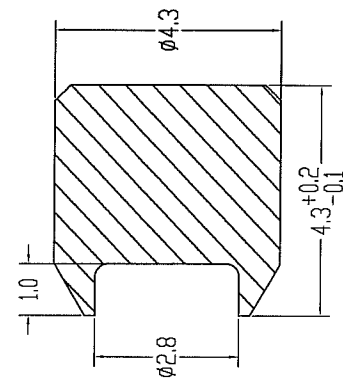
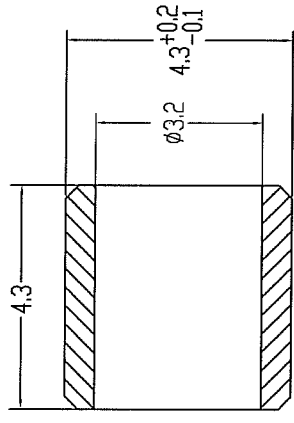
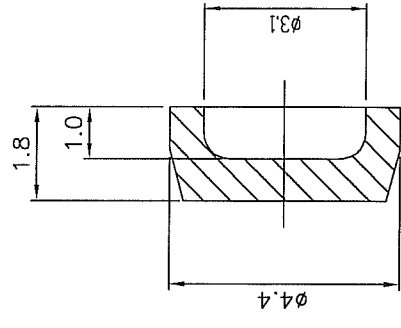
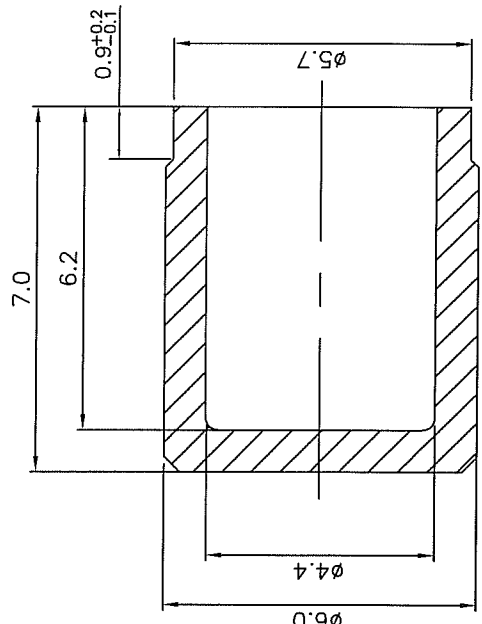
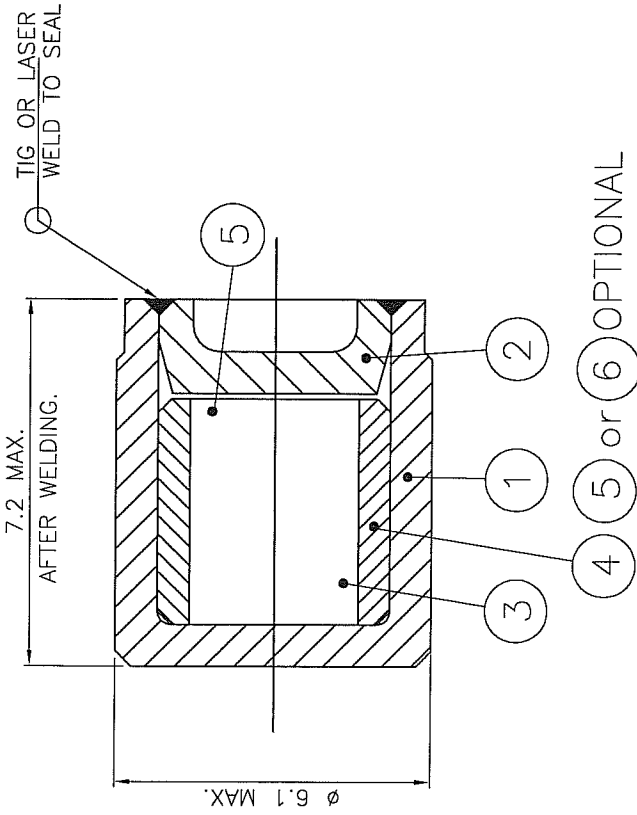


November 22, 2021  
(DATE)

 William Schoonover  
Associate Administrator for Hazardous  
Materials Safety

Revision 10 - Issued to extend the expiration date.

Item #	Description	Qty.
1	SHEATH BODY STAIN.STL.	1
2	SHEATH LID STAIN.STL.	1
3	ACTIVE MATERIAL	AR
4	SPACER(OPTIONAL) STAIN.STL.	AR
5	CERAMIC FIBER FILLER(OPTIONAL)	AR
6	ALUMINUM DR STEEL FILLER (XN146/2 ONLY)	1



ITEM 2

ITEM 1

ITEM 4

ITEM 6

 40 NORTH AVE, BURLINGTON, MA 01803	<b>DESCRIPTIVE DRAWING</b>	
	TITLE: XN146, AXN146 & XN146/2 CAPSULE ASSY	
APPROVALS <i>D. L. H.</i> <i>R. P. S.</i>	DATE 11A-02 11AUG 08	SIZE <b>A</b>
DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE STATED TOLERANCES: X ±0.5 X.X ±0.1 X.XX ±0.05 ANGULAR ±5°		REV E
SCALE: NONE		SHEET 1 OF 1

ERF # 1878



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**CERTIFICATE NUMBER:** USA/0619/S-96

**ORIGINAL REGISTRANT(S) :**

QSA Global, Inc.  
40 North Avenue  
Burlington, MA, 01803  
USA