



U.S. Department
of Transportation
**Pipeline and
Hazardous Materials
Safety Administration**

**IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE USA/0623/S-96, REVISION 4**

East Building, PHH-23
1200 New Jersey Avenue Southeast
Washington, D.C. 20590

This certifies that the source described has been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency¹ and the United States of America² for the transport of radioactive material.

1. Source Identification - QSA Global, Inc. Model X.4 (Manufactured on or after July 17, 1980).
2. Source Description - Cylindrical double encapsulation made of stainless steel and tungsten inert gas or laser seal welded. Approximate outer dimensions are 22.4 mm (0.88 in.) in diameter and 48.4 mm (1.91 in.) in length. Minimum wall thickness of the sheath body is 1.2 mm (0.005 in.) and of the cell body is 1.2 mm (0.005 in.). Construction shall be in accordance with attached AEA Technology QSA, Inc. Drawing No. RBA11014, Rev. A.
3. Radioactive Contents - No more than 740.0 GBq (20.0 Ci) of Americium-241. The Am-241 is in the form of an oxide mixed with beryllium and pressed into a solid pellet.
4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations¹ 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 applicable requirements of Subpart H of 10 CFR 71.
5. Expiration Date - This certificate expires on August 31, 2022.

¹ "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

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

CERTIFICATE USA/0623/S-96, REVISION 4

This certificate is issued in accordance with paragraph 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the July 07, 2017 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:



Aug 02 2017

(DATE)

 _____
William Schoonover

Acting Associate Administrator for Hazardous Materials Safety

Revision 4 - Issued to extend the expiration date.

Item #	Description	Qty.
1	SHEATH BODY STAIN.STL.	1
2	SHEATH LID STAIN.STL.	1
3	CELL BODY STAIN.STL.	1
4	CELL LID STAIN.STL.	1
5	ACTIVE MATERIAL	AR

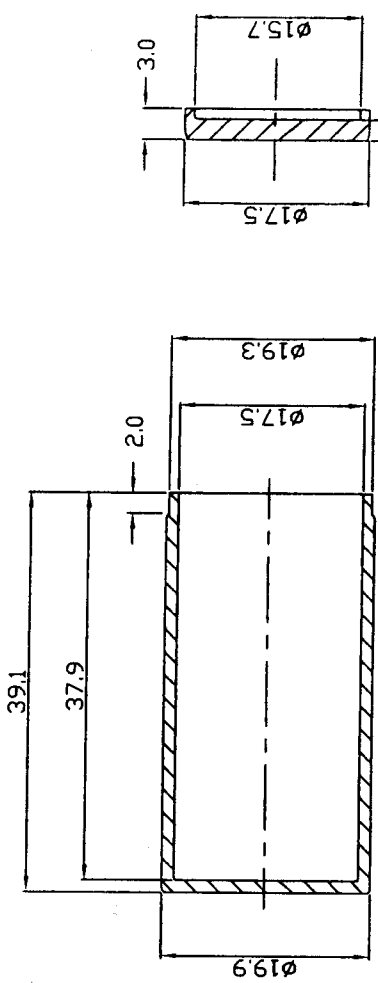
TIG OR LASER WELD TO SEAL

48.6 MAX. AFTER WELDING

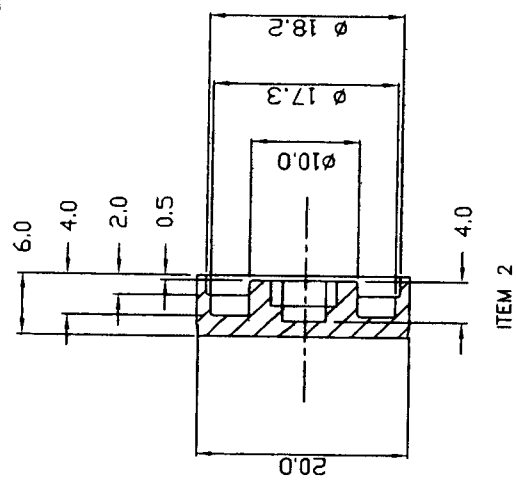
TIG OR LASER WELD TO SEAL

Ø22.5 MAX.

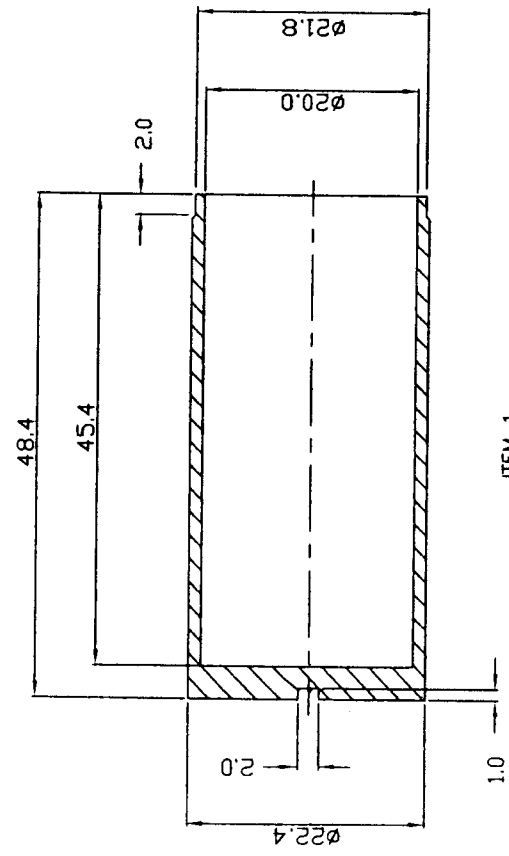
M6 THREAD



ITEM 4



ITEM 1



DESCRIPTIVE DRAWING

TITLE X4 CAPSULE ASSEMBLY

APPROVALS

ZZJAN03

DAV MAR 03

DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE STATED TOLERANCES:

X ±0.5

X.X ±0.1

X.XX ±0.05

ANGULAR ±5°

INTERNAL $\frac{M}{N}$

EXTERNAL $\frac{N}{M}$

ERF # 430

SIZE A

DWG. NO. RBA11014

SCALE: NONE

SHEET 1 OF 1

REV A