



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/0659/S, REVISION 7

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 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 X.20 (Manufactured on or after March 3, 1980).
2. Source Description - Annular double encapsulation made of stainless steel and tungsten inert gas or laser seal welded. Approximate exterior dimensions are 33.5 mm (1.32 in.) in diameter and 19.4 mm (0.76 in.) in length. Minimum wall thickness of the outer encapsulation is 0.4 mm (0.016 in.). Construction shall be in accordance with attached AEA Technology QSA, Inc. Drawing No. RBA11120, Rev. B (2 pages).
3. Radioactive Contents - No more than 74.0 GBq (2.0 Ci) of Americium-241. The Am-241 is in the form of an oxide mixed with a beryllium powder and pressed into a solid pellet.
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, 2018 Edition, No. SSR-6 (Rev. 1)" 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/0659/S, REVISION 7**

5. Expiration Date - This certificate expires on January 31, 2031. 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 December 31, 2025 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:

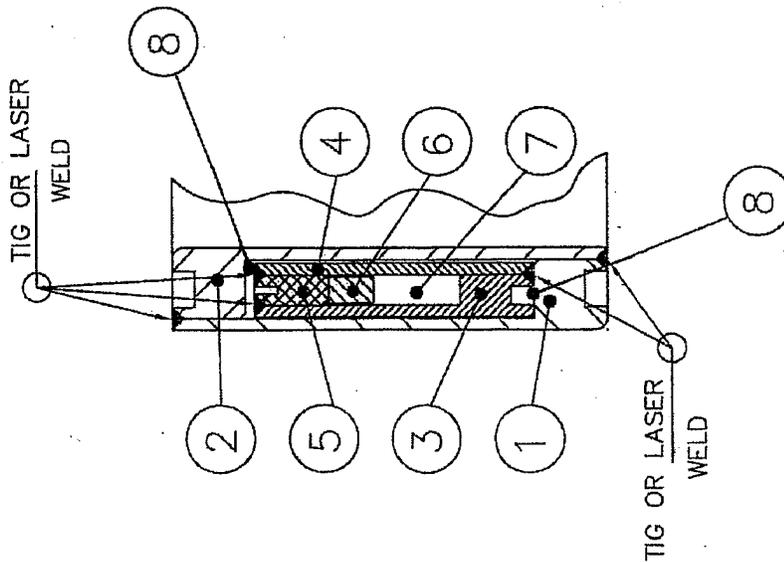


William Quade  
Acting Associate Administrator for  
Hazardous Materials Safety

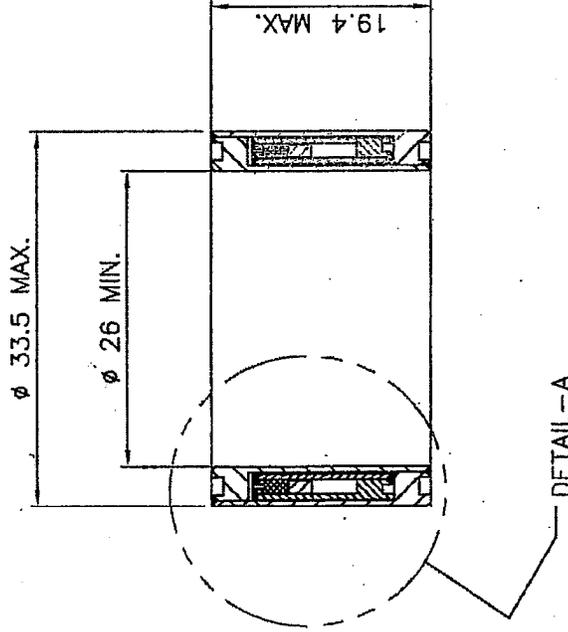
February 13, 2026  
(DATE)

Revision 7 - Issued to endorse to 2018 edition of the IAEA Regulations for the Safe Transport of Radioactive Material, SSR-6 (Rev. 1) and to extend the expiration date.

Item	Description	Material	QTY
1	OUTER SHEATH	STAIN.STL.	1
2	INNER SHEATH	STAIN.STL.	1
3	CELL OUTER	STAIN.STL.	1
4	CELL INNER	STAIN.STL.	1
5	END RING	STAIN.STL.	1
6	PACKING RING	STAIN.STL.	1
7	ACTIVE MATERIAL		A/R
8	CERAMIC FIBER (OPTIONAL)		A/R



DETAIL-A  
SCALE 4/1



APPROVALS:

*R. Munn* 9 Jan 04  
*R. P. ...* 15 Jan 04

DIMENSIONS IN MILLIMETERS  
UNLESS OTHERWISE STATED TOLERANCES:

X.X ±0.1 INTERNAL   $\nabla$   
X.XX ±0.05 EXTERNAL   $\nabla$   
ANGULAR ±5'

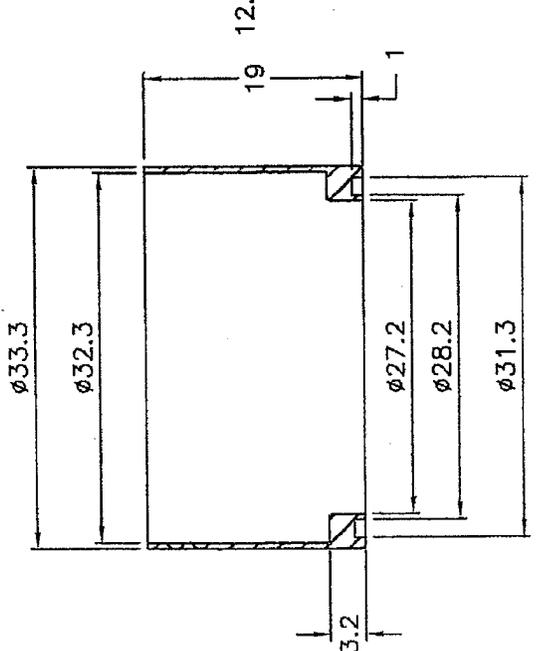
AEATECHNOLOGY  
QSA  
40 NORTH AVE. BURLINGTON, MA 01803

DESCRIPTIVE DRAWING

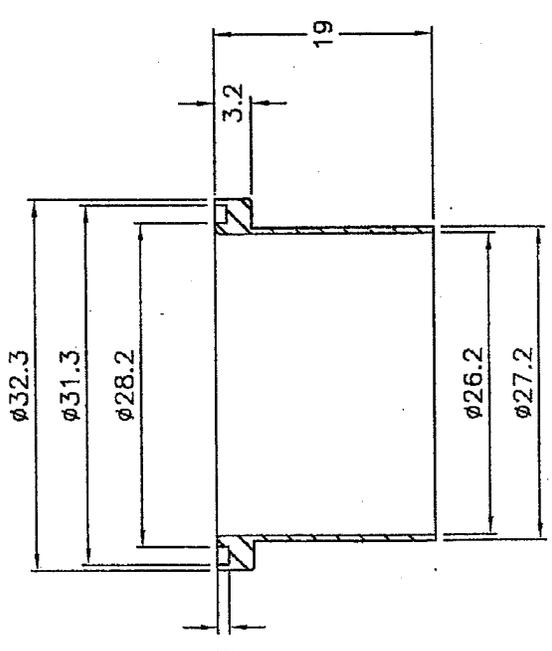
TITLE X20 CAPSULE ASSEMBLY

SIZE A DWG. NO. RBA11120 SCALE: NONE SHEET 1 OF 2

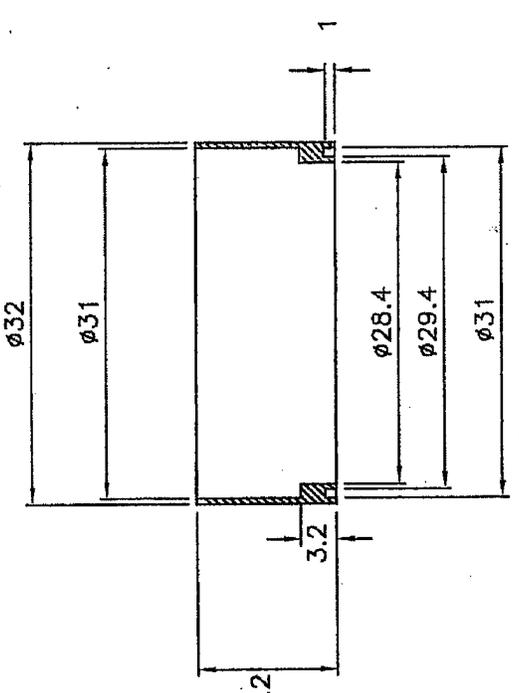
REV B



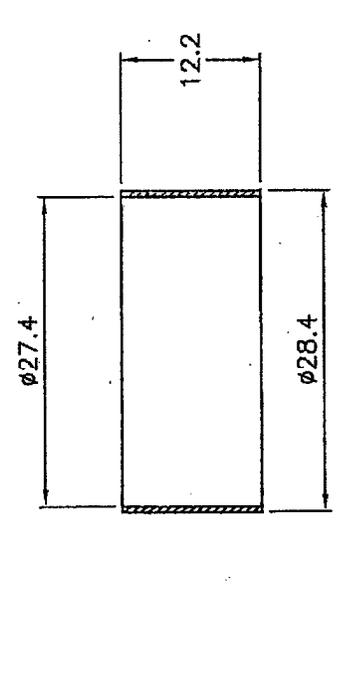
1 OUTER SHEATH



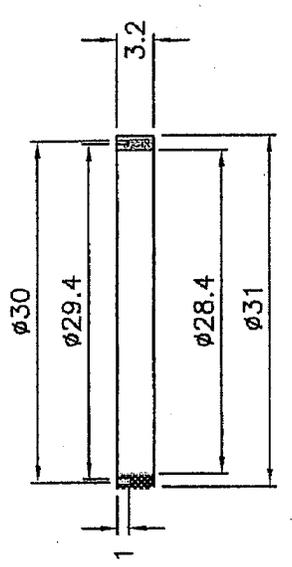
2 INNER SHEATH



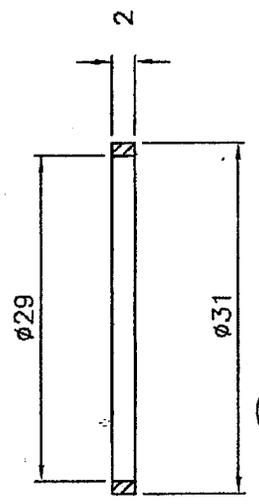
3 CELL OUTER



4 CELL INNER



5 END RING



6 PACKING RING



DESCRIPTIVE  
DRAWING

TITLE		X20 CAPSULE ASSEMBLY	
SIZE	DWG. NO.	RBA11120	
A	SCALE:	NONE	SHEET 2 OF 2
REV			B

DIMENSIONS IN MILLIMETERS  
UNLESS OTHERWISE STATED TOLERANCES:

X	±0.5	INTERNAL	∇
XX	±0.1	INTERNAL	∇
XXX	±0.05	EXTERNAL	∇
ANGULAR	±5'		

ERF # 753



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**CERTIFICATE NUMBER:** USA/0659/S-96

**ORIGINAL REGISTRANT(S) :**

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

Troxler Electronic Laboratories  
3008 Cornwallis Road  
Research Triangle Park, NC, 27709  
USA

U.S. Geologic Survey  
Idaho Water Science Center, U.S. Geological Survey  
Department of Interior  
1955 N Fremont MS 4131  
Idaho Falls, ID, 83415  
USA