



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/0612/S-96, REVISION 6

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 Agency¹ and the United States of America² for the transport of radioactive material.

1. Source Identification - QSA Global, Inc. Model Numbers X.1301 and X.1302.
2. Source Description - Both models are single encapsulations made of Armco 17-4 PH stainless steel, with stainless steel inserts. Minimum wall thickness in each case is 0.60 mm (0.02 in.). Welds are by tungsten inert gas or laser method. Approximate outer dimensions of Model X.1301 are 8.5 mm (0.33 in.) in diameter and 14.5 mm (0.57 in.) in length. Approximate outer dimensions of Model X.1302 are 7.94 mm (0.31 in.) in diameter and 10.65 mm (0.42 in.) in length. Construction shall be in accordance with attached AEA Technology QSA, Inc. Drawings RBA63205, Rev. B and RBA61678, Rev. B for Model X.1301, and Drawings RBA63206, Rev. B and RBA61721, Rev. B for Model X.1302.
3. Radioactive Contents - No more than 130 GBq (3.5 Ci) of Cesium-137 for Model X.1301, and no more than 93 GBq (2.5 Ci) of Cesium-137 for Model X.1302. The Cesium-137 is in solid form, bonded in a borosilicate glass polymer.

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

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

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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.

5. Expiration Date - This certificate expires on March 31, 2027. 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 March 1, 2022 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:

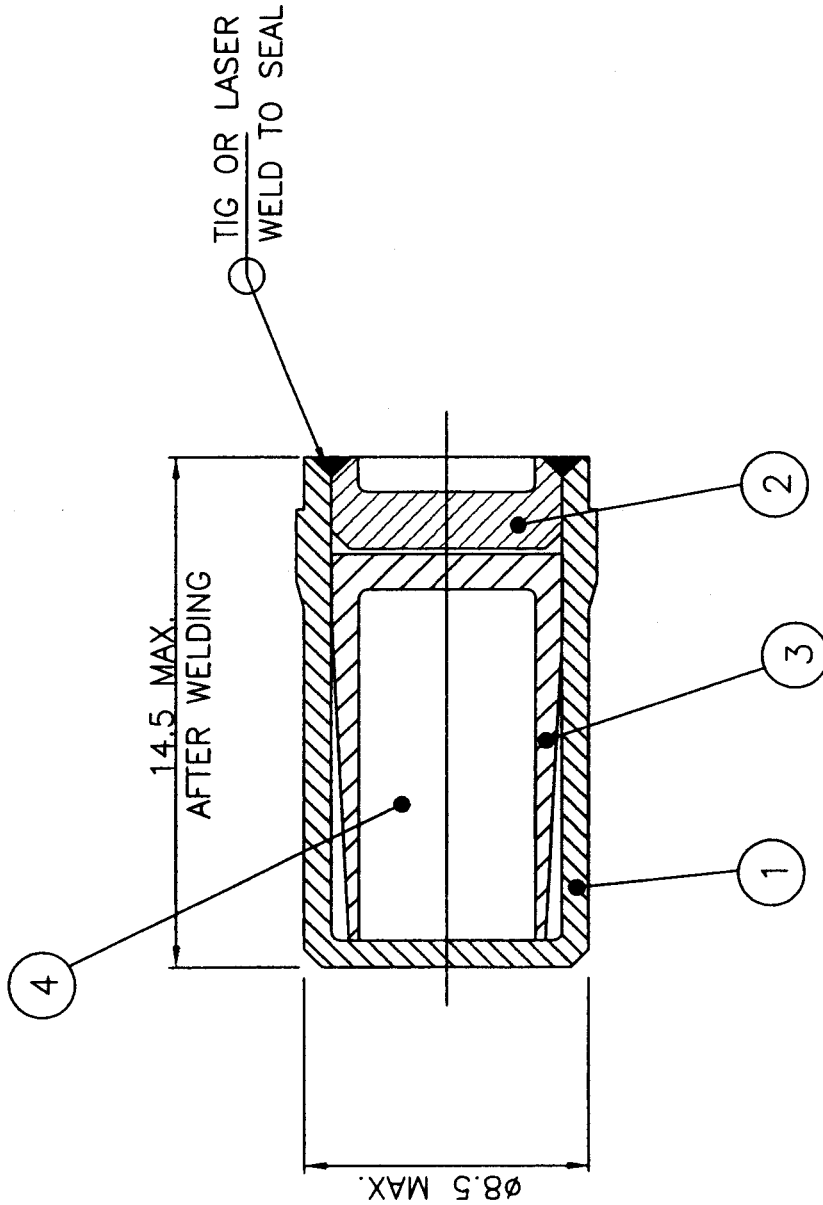


William Schoonover
Associate Administrator for Hazardous
Materials Safety

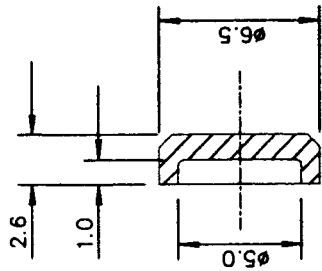
April 04, 2022
(DATE)

Revision 6 - Issued to extend the expiration date.

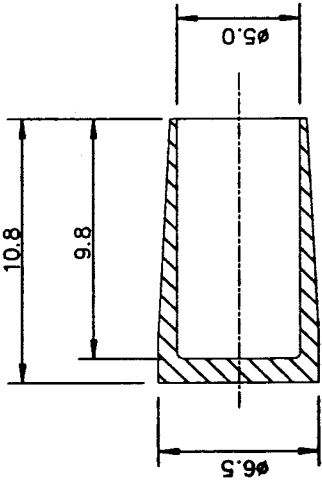
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1	BODY	STAINLESS STEEL	1
2	LID	STAINLESS STEEL	1
3	INSERT	STAINLESS STEEL	1
4	ACTIVE MATERIAL		A/R



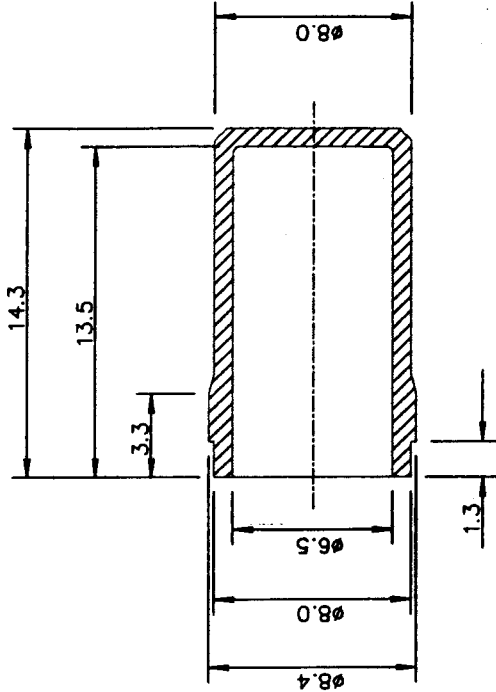
 40 NORTH AVE., BURLINGTON, MA 01803		DESCRIPTIVE DRAWING	
APPROVALS <i>[Signature]</i> 12 Feb 03 <i>[Signature]</i> 12 Feb 03		TITLE X1301 CAPSULE ASSEMBLY	
DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE STATED TOLERANCES: X ±0.5 X.X ±0.1 X.XX ±0.05 ANGULAR ±5°		SIZE A	REV B
ERF 443		SCALE: N/A	SHEET 1 OF 1



ITEM.1 LID



ITEM.2 INSERT



ITEM.3 BODY

- NOTES:
 1. MATERIAL: ITEM 1 = 17-4 PH
 ITEM 2 = 316L STAINLESS STEEL
 ITEM 3 = 17-4 PH

APPROVALS	
<i>[Signature]</i>	12 Feb 03
<i>[Signature]</i>	12 Feb 03

DIMENSIONS IN MILLIMETERS
 UNLESS OTHERWISE STATED TOLERANCES:

X	±0.5	INTERNAL	±0.1
X.X	±0.1	INTERNAL	±0.1
X.XX	±0.05	EXTERNAL	±0.05
ANGULAR	±5°		



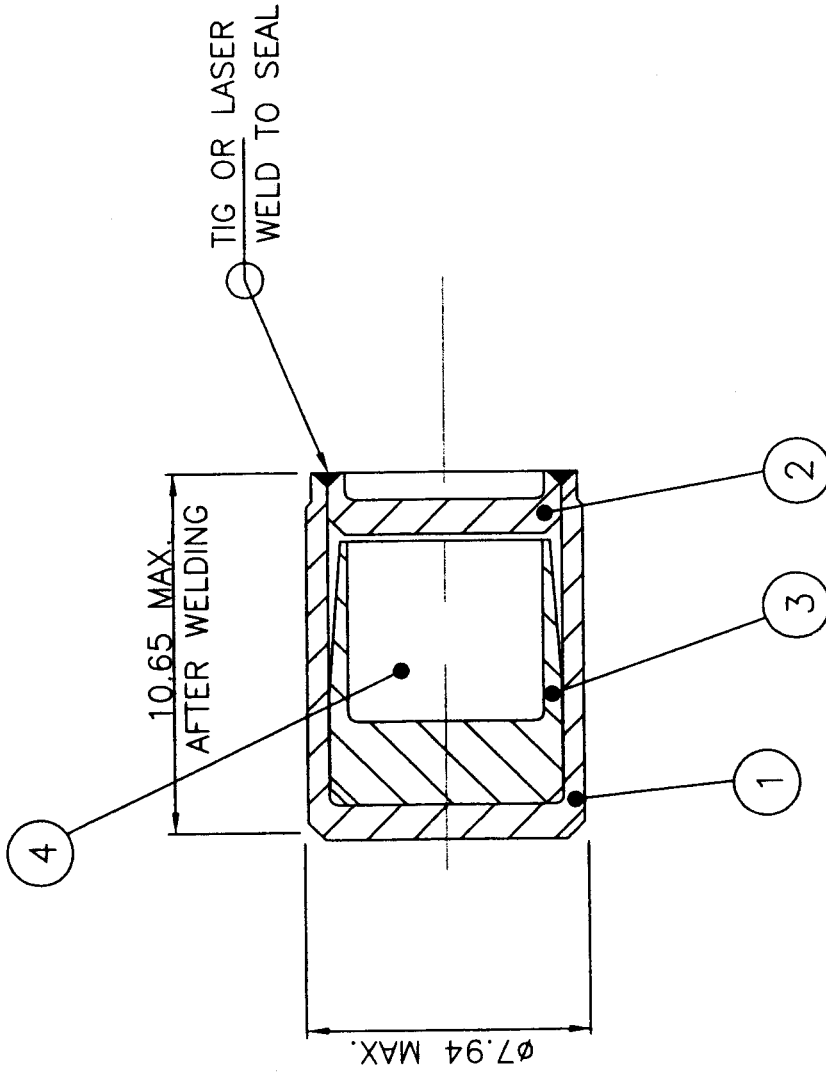
DESCRIPTIVE
 DRAWING

TITLE X1301 CAPSULE DETAILS

SIZE	DWG. NO.	REV
A	RBA61678	B
SCALE:	N/A	SHEET 1 OF 1

ERF # 443

Item	Description	Material	QTY
1	BODY	STAINLESS STEEL	1
2	LID	STAINLESS STEEL	1
3	INSERT	STAINLESS STEEL	1
4	ACTIVE MATERIAL		A/R



APPROVALS	
<i>[Signature]</i>	12 Feb 03
<i>[Signature]</i>	12 Feb 03

DIMENSIONS IN MILLIMETERS
UNLESS OTHERWISE STATED TOLERANCES:

X ±0.5
X.X ±0.1
X.XX ±0.05
ANGULAR ±5'

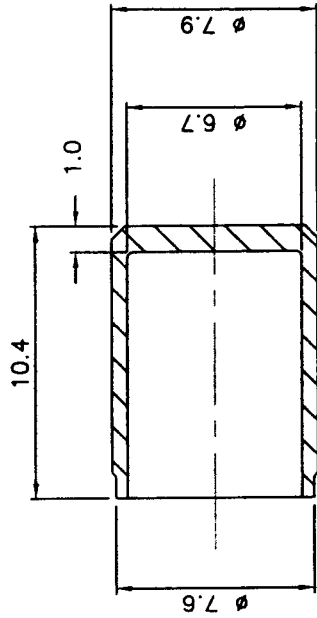
INTERNAL $\frac{NB}{\Delta}$
EXTERNAL $\frac{NB}{\nabla}$

AEATECHNOLOGY
QSA
40 NORTH AVE, BURLINGTON, MA 01803

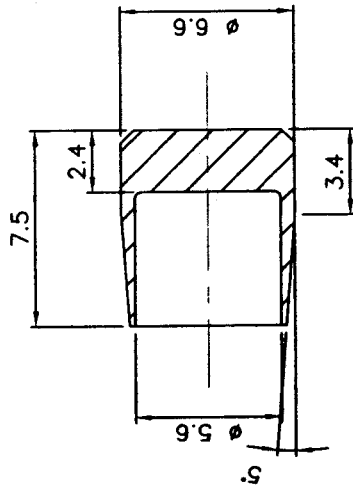
DESCRIPTIVE
DRAWING

TITLE X1302 CAPSULE ASSEMBLY

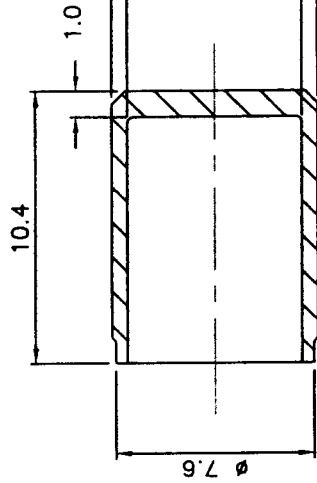
SIZE	DWG. NO.	REV
A	RBA63206	B
SCALE: N/A		SHEET 1 OF 1



ITEM.1 LID



ITEM.2 INSERT



ITEM.3 BODY

NOTES:
 1. MATERIAL: ITEM 1 = 17-4 PH
 ITEM 2 = 316L STAINLESS STEEL
 ITEM 3 = 17-4 PH

APPROVALS	
<i>[Signature]</i>	12/18/03
<i>[Signature]</i>	12/18/03

DIMENSIONS IN MILLIMETERS
 UNLESS OTHERWISE STATED TOLERANCES:
 X ±0.5
 XX ±0.1
 XXX ±0.05
 ANGULAR ±5'
 INTERNAL M▽
 EXTERNAL N▽



DESCRIPTIVE
DRAWING

TITLE X1302 CAPSULE DETAIL

SIZE	DWG. NO.	REV
A	RBA61721	B
SCALE: N/A		SHEET 1 OF 1

ERF 443



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CERTIFICATE NUMBER: USA/0612/S-96

ORIGINAL REGISTRANT(S) :

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