



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

**IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE USA/0704/S-96, REVISION 1**

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 XN162/3 (Manufactured on or after September 27, 1996).
2. Source Description - Cylindrical double encapsulation with rectangular end piece extension made of stainless steel and tungsten inert gas or laser seal welded. Approximate outer dimensions of the cylindrical portion are 16.7 mm (0.66 in.) in diameter and 12.8 mm (0.5 in.) in length. Approximate outer dimensions of the rectangular end piece extension are 38.0 mm (1.5 in.) in height, 19.0 mm (0.75 in.) in width, and 3.2 mm (0.13 in.) in depth. Minimum wall thickness of the outer encapsulation is 0.04 mm (0.002 in.). Construction shall be in accordance with attached AEA Technology QSA, Inc. Drawing Number RBA62802, Rev. B.
3. Radioactive Contents - No more than 37.0 GBq (1.0 Ci) of Strontium-90. The Sr-90 is in the form of a ceramic enamel.
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 December 31, 2014.

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.

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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 December 01, 2009 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:



Dec 08 2009

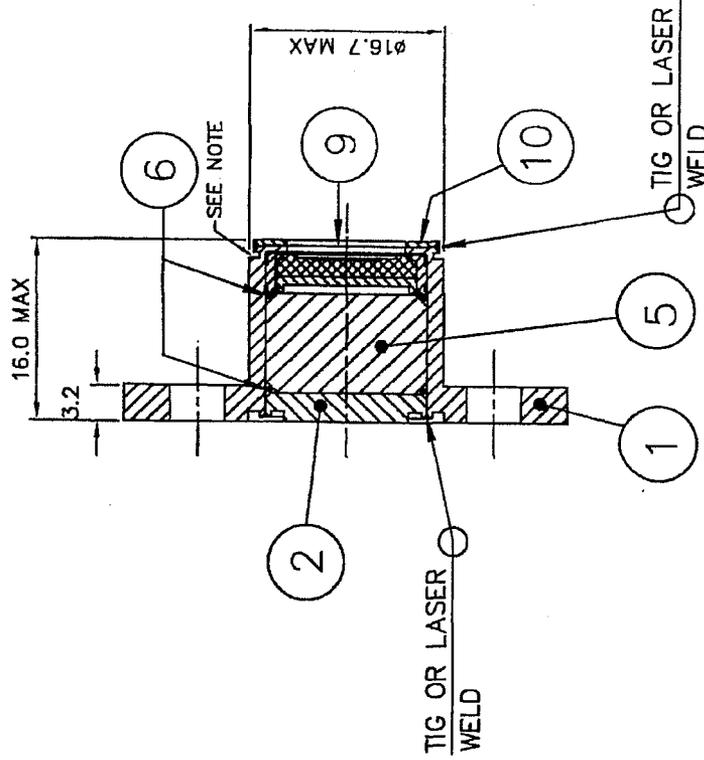
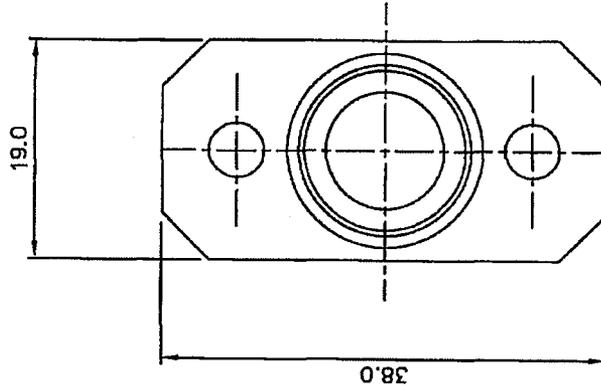
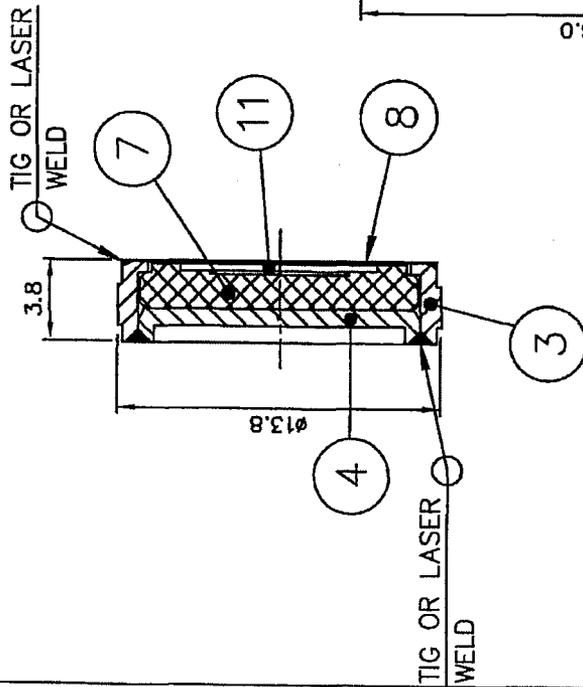
(DATE)

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Dr. Magdy El-Sibaie

Acting Associate Administrator for Hazardous Materials Safety

Revision 1 - Issued to extend the expiration date and to update corporate name.

ENLARGED CELL DETAIL
SCALE 2/1



ITEM	DESCRIPTION	QTY
1	SHEATH BODY	1
2	SHEATH LID	1
3	CELL BODY	1
4	CELL LID	1
5	PLUG	1
6	PACKING RING	1
7	CELL INSERT	1
8	CELL WINDOW	1
9	SHEATH WINDOW	1
10	RETAINING RING	1
11	ACTIVE MATERIAL	A/R

APPROVALS
L. P. P. 3/16/05
M. M. 7/11/05

DIMENSIONS IN MILLIMETRES
 UNLESS OTHERWISE STATED TOLERANCES:
 X ±0.5
 XX ±0.1
 XXX ±0.05
 ANGULAR ±5'
 INTERNAL ✓
 EXTERNAL ✓



40 NORTH AVE., BURLINGTON, MA 01803

DESCRIPTIVE
DRAWING

TITLE XN162/3 CAPSULE ASSEMBLY

SIZE A DWG. NO. RBA62802

SCALE: NONE SHEET 1 OF 1

REV B

NOTE: RECESS NOT PRESENT ON ALL CAPSULES

ERF # 1008



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CERTIFICATE NUMBER: USA/0704/S-96, Revision 1

ORIGINAL REGISTRANT(S):

Ms. Lori Podolak
Product Licensing Specialist
QSA Global, Inc.
40 North Avenue
Burlington, MA 01803

Ms. Cathleen Roughan
Director, Regulatory Affairs and QA
QSA Global, Inc.
40 North Avenue
Burlington, MA 01803

Mr. Michael Fuller
Regulatory Compliance Associate
QSA Global, Inc.
40 North Avenue
Burlington, MA 01803