



U.S. Department
of Transportation

Pipeline and
Hazardous Materials
Safety Administration

IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE USA/0767/S-96, REVISION 0

East Building, PHH-23
1200 New Jersey Avenue SE
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.220 (Manufactured on or after April 1, 1981).
2. Source Description - Cylindrical double encapsulation made of stainless steel and tungsten inert gas seal welded. Approximate exterior dimensions are 9.14 mm (0.36 in.) in diameter and 14.73 mm (0.58 in.) in length. Minimum wall thickness of the outer encapsulation is 0.57 mm (0.02 in.). Construction shall be in accordance with attached AEA Technology QSA, Inc. Drawing No. RBA10036, Rev. A.
3. Radioactive Contents - No more than 4.6 GBq (124.2 mCi) of Americium-241 and 4.6 GBq (124.2 mCi) of Cesium-137. The Am-241 is in the form of an oxide mixed with a beryllium powder that is then pressed into a solid pellet. The Cs-137 is a cesium silicate formed in a glass matrix. Ceramic fiber packing material is inserted between the Am-241:Be and the Cs-137.
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 February 28, 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 February 14, 2009 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:



Mar 06 2009

(DATE)

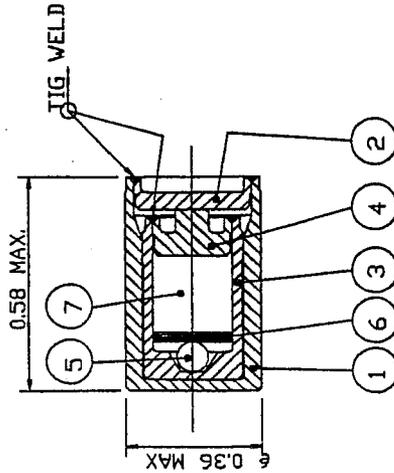
Robert A. Richard

Deputy Associate Administrator for Hazardous Materials Safety

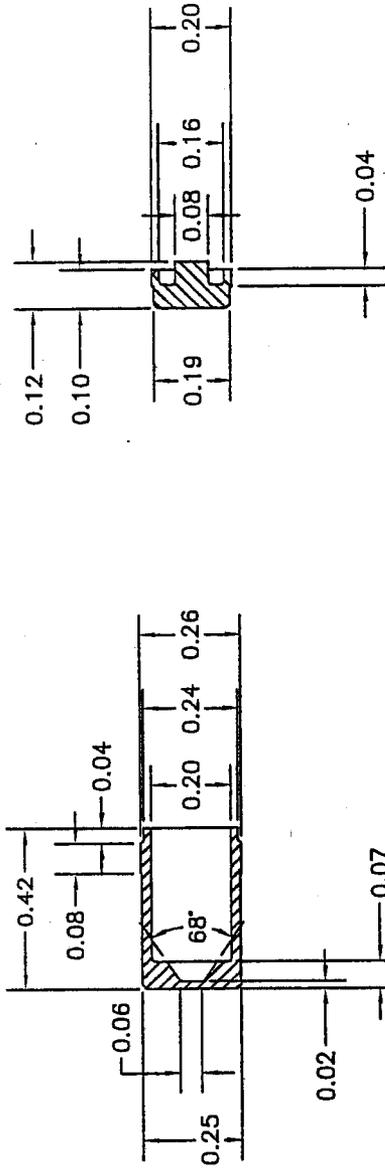
Revision 0 - Original issue. Issued to replace IAEA Certificate of Competent Authority Number USA/0670/S.

Item No	Description	No off
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	0.08 DIA BEAD- SEE NOTE	1
6	CERAMIC FIBRE PACKING DISC	A/R
7	ACTIVE MATERIAL -AmBe	A/R

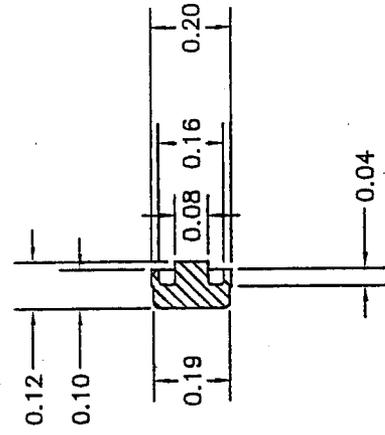
NOTE:
ITEM 5 MATERIAL
Cs-137 BONDED IN GLASS



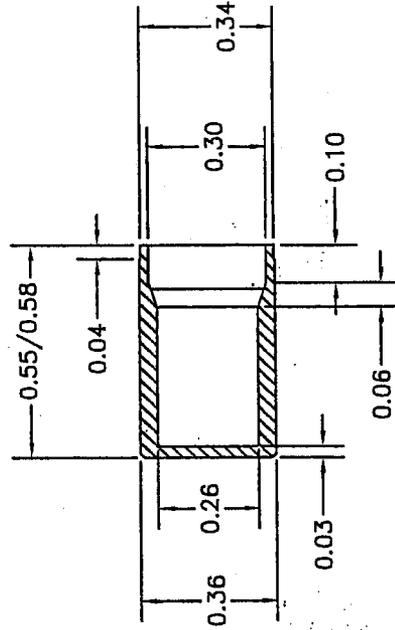
X220 ASSEMBLY



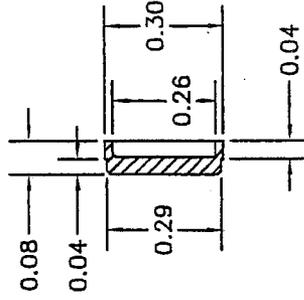
3 CELL BODY



4 CELL LID



1 SHEATH BODY



2 SHEATH LID

APPROVALS
R. Mann
L. C. DeLoe

10 MAR 07
10 MONTH



DESCRIPTIVE
DRAWING

TITLE X220 CAPSULE ASSEMBLY
SIZE A
SCALE: NONE

DWG. NO. RBA10036
REV A
SHEET 1 OF 1

DIMENSIONS IN INCHES
TOLERANCES:
FRACTIONS ±1/32
X ± 0.1
XX ± 0.05
XXX ± 0.005

ERF # 772



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CERTIFICATE NUMBER: USA/0767/S-96, Revision 0

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