



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

**IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE USA/0046/S-96, REVISION 8**

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 - MRC Model No. 2404 (Restricted to sources manufactured prior to March 31, 2002).
2. Source Description - Cylindrical double encapsulation made of stainless steel and tungsten inert gas seal welded. Approximate outer dimensions are 49 mm (1.93 in.) in diameter and 26 mm (1.02 in.) in length. Both the inner and outer encapsulations have windows 0.127 mm (0.005 in.) thick, with a diameter of 26 mm (1.02 in.) for the inner encapsulation and 33 mm (1.312 in.) for the outer encapsulation. Construction shall be in accordance with attached MRC Drawing No. C2404-AA01, Rev. 0.
3. Radioactive Contents - No more than 44.4 GBq (1.2 Ci) of Americium-241. The Am-241 is in the form of a powdered oxide.
4. Special Conditions -
 - a. The source capsule must have no known or suspected defects.
 - b. This special form certificate may be used only for transfer of the source for the purpose of recycling or disposal.
 - c. A leak test (standard wipe test is acceptable) must be performed on the device (source capsule in its source holder) or source capsule itself within one month before any shipment using this certificate, and show no contamination above background.

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.

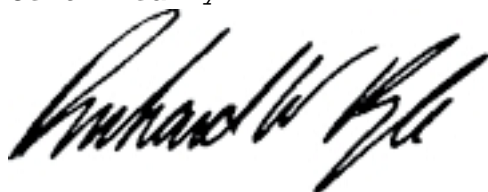
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5. Quality Assurance - Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations¹ shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors in the United States exporting shipments under this certificate shall satisfy the applicable requirements of Subpart H of 10 CFR 71.

6. Expiration Date - This certificate expires on May 31, 2022.

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 May 25, 2017 petition by Honeywell International, Duluth, GA, and in consideration of other information on file in this Office.

Certified By:



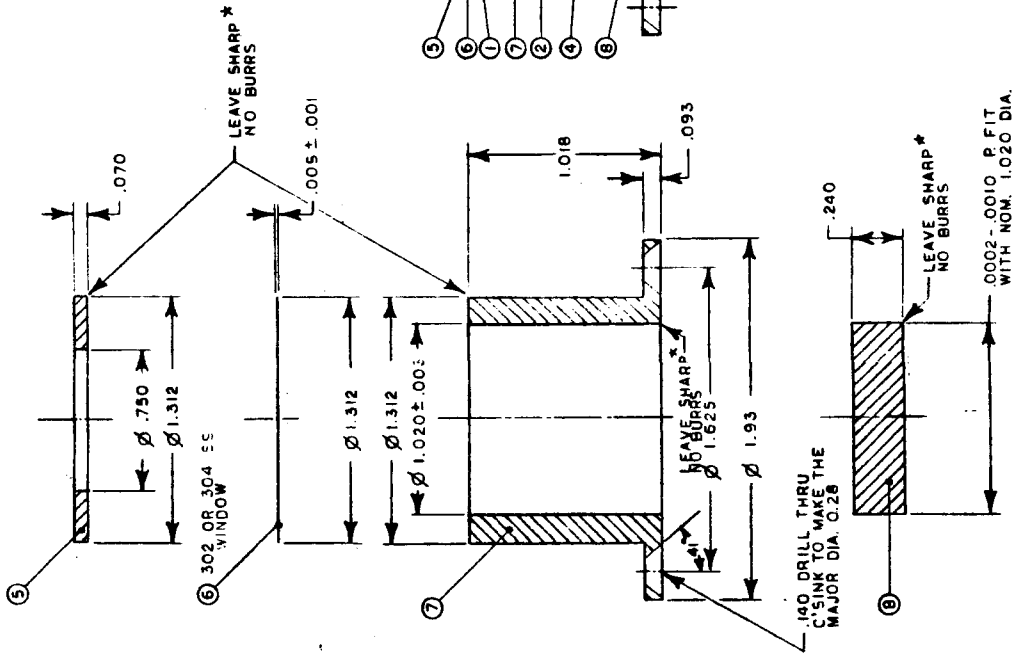
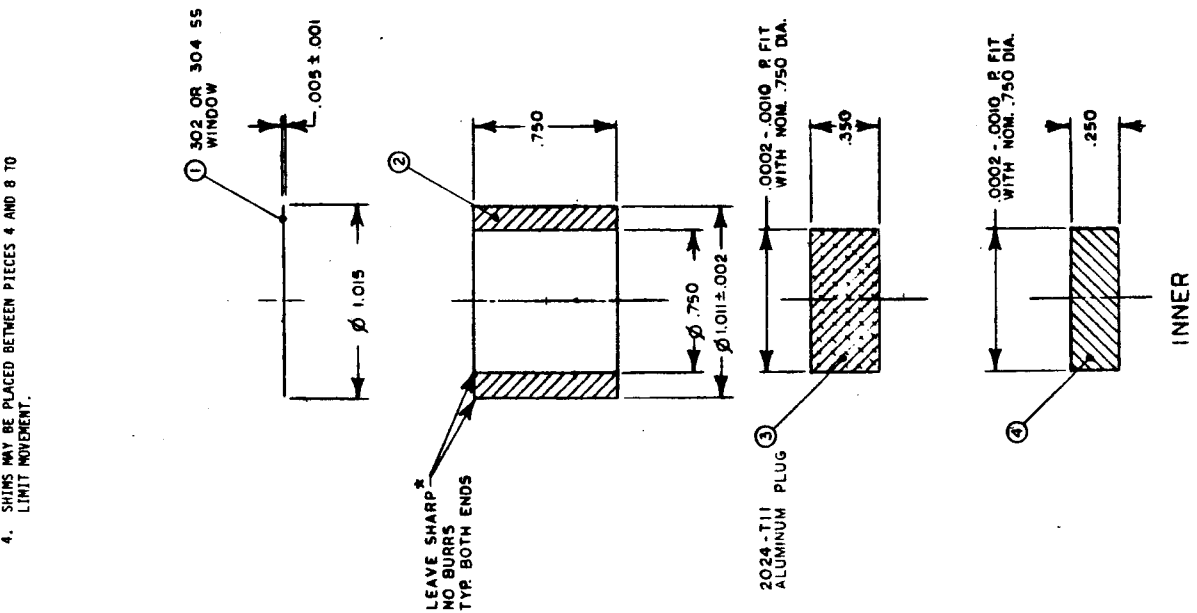
William Schoonover
Acting Associate Administrator for Hazardous Materials Safety

Jun 02 2017
(DATE)

Revision 8 - Issued to renew the expiration date.

NOTES:

- HERMETIC SEAL WELDS ARE TO BE MADE BETWEEN PIECES 1 AND 2, 2 AND 4, 6 AND 7, 7 AND 8.
- UNLESS OTHERWISE SPECIFIED:
BREAK OUTSIDE CORNERS .010 - .020*
RADIUS INSIDE CORNERS .010*
- *INDICATES VISUAL INSPECTION IS ACCEPTABLE.
- SHIMS MAY BE PLACED BETWEEN PIECES 4 AND 8 TO LIMIT MOVEMENT.



ASSEMBLY

Pc 8 TO BE RECESSED INTO Pc 7 APPROX. .010
NO WELD BUILD-UP ON Pc 7 IS PERMITTED WHEN WELDING Pc 8 TO Pc 7. MACHINING OR GRINDING IS PERMITTED TO REMOVE EXCESS WELD MATERIAL

REV	OF
DWG NO.	SHEET

ZONE	BY	DATE	APPROVAL

REVISIONS

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		TOLERANCES:		DECIMALS		FRACTIONS	
XX	± .02	XX	± .005	XX	± 1/64	XX	± 1/32
XXX	± .005	XXX	± .005	XXX	± 1/64	XXX	± 1/32
ALL SURFACES	32	ALL SURFACES	32	ALL SURFACES	32	ALL SURFACES	32
MATERIAL	AS SHOWN	MATERIAL	AS SHOWN	MATERIAL	AS SHOWN	MATERIAL	AS SHOWN
FINISH	AS SHOWN	FINISH	AS SHOWN	FINISH	AS SHOWN	FINISH	AS SHOWN

W/APP	RAK	9/18/61
D/APP	HEC	9/18/61
W/APP	HE	7/21/61
D/APP	9-8	7-17-61
CHECKED		
DRAWN	HAM	9-30-61
SIGNATURE		
DATE		

MONBANTO RESEARCH CORPORATION
DAYTON LABORATORY
DAYTON, OHIO

GAMMA SOURCE CONTAINER
MODEL 2404

REPLACES A2404-AACO
AND B2404-AAD1

DWG NO. C2404-AA01

SCALE 2X WT. ACT.

SHEET OF



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Hazardous Materials
Safety Administration**

CERTIFICATE NUMBER: USA/0046/S-96, Revision 8

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