



U.S. Department
of Transportation

Pipeline and
Hazardous Materials
Safety Administration

IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE USA/0154/S-96, REVISION 9

East Building, PHH-23
1200 New Jersey Avenue Southeast
Washington, D.C. 20590

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 Nos. 60001, 60004, 60006, 60017, 60018, 60020, 60021, and 68310.
2. Source Description - Sources are single encapsulations of either Type 304 or 304L seal welded stainless steel. The diameter of all capsules is 6.35 mm (0.25 in.). The length of Model Nos. 60001, 60004, 60017, 60018, 60020, and 60021 is 24.6 mm (0.97 in.); the length of Model No. 60006 is 22.9 mm (0.90 in.); the length of Model No. 68310 is 19.8 mm (0.78 in.). All capsules shall be manufactured in accordance with attached Tech/Ops Drawing No. 60050 or Amersham Drawing No. 60024.
3. Radioactive Contents - Not more than 8.88 TBq (240 Ci) of metallic Ir-192 in Model Nos. 60001, 60004, or 60006. Not more than 4.44 TBq (120 Ci) of metallic Ir-192 in Model Nos. 60017, 60018, 60020, 60021, or 68310.
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 July 31, 2012.

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.

CERTIFICATE USA/0154/S-96, REVISION 9

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 June 19, 2007 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:



Jul 05 2007

(DATE)

Bob Richard

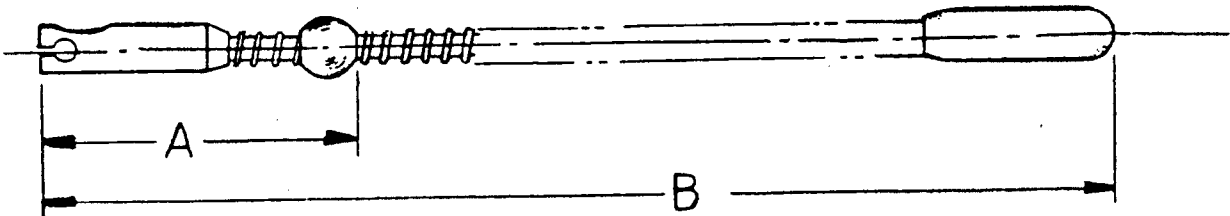
Deputy Associate Administrator for Hazardous Materials Safety

Revision 9 - Issued to extend the expiration date and update the corporate name.

AG0050


REV.	DATE	DESCRIPTION
A	12-18-78	SEE SHEET 2
B	10-15-84	DELETED DWG SIZES FROM DWG #5
C	1 NOV 84	ADDED MODELS 844, 848 & 866

MODEL	CAPACITY (CURIES)	CAPSULE STYLE	DIM A	DIM B
A424-1	120	60001 OR 60004	2.373	7 ⁷ / ₁₆
A424-9	120	60001 OR 60004	1.225	7 ³ / ₁₆
814	120	60001 OR 60004	1.875	7 ³ / ₁₆
68309	120	68310	NOT APPLICABLE; ATTACHED DIRECTLY TO DRIVE CABLE	
69701	120	60001 OR 60004	2.537	7 ¹¹ / ₁₆
A424-20	240	60001 OR 60004	1.225	8 ¹⁵ / ₁₆
A58101	240	60006	NOT APPLICABLE NOT WIRE MOUNTED	
A424-6	120	60001 OR 60004	N.A.	10 ¹¹ / ₁₆
844	120	60017 OR 60018	1.40	6 ¹¹ / ₁₆
848	120	60020 OR 60021	2.56	7.62
866	120	60020 OR 60021	1.44	6.73



MATERIALS	
FINISH	
DRAWN BY	UNLESS OTHERWISE SPECIFIED TOLERANCES ARE
<i>J. J. Kelly 6 OCT 78</i>	.X ±
CHECKED BY	.XX ±
	.XXX ±
APPROVED BY	ANGLES ±
	FRACTIONS ±

TECHNICAL OPERATIONS INC.
RADIATION PRODUCTS DIVISION
BURLINGTON, MA 01803



DWG TITLE

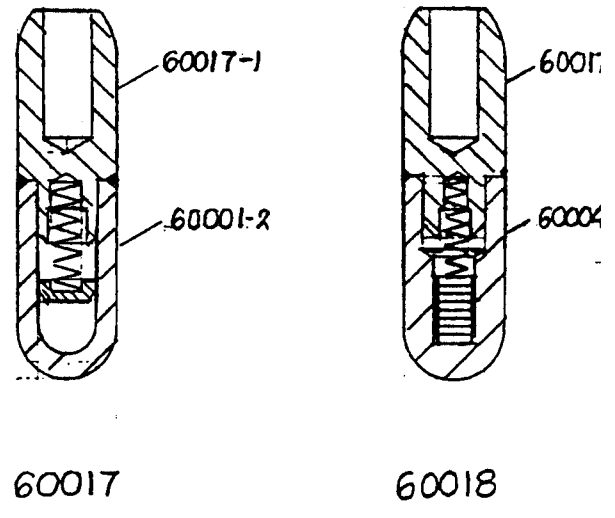
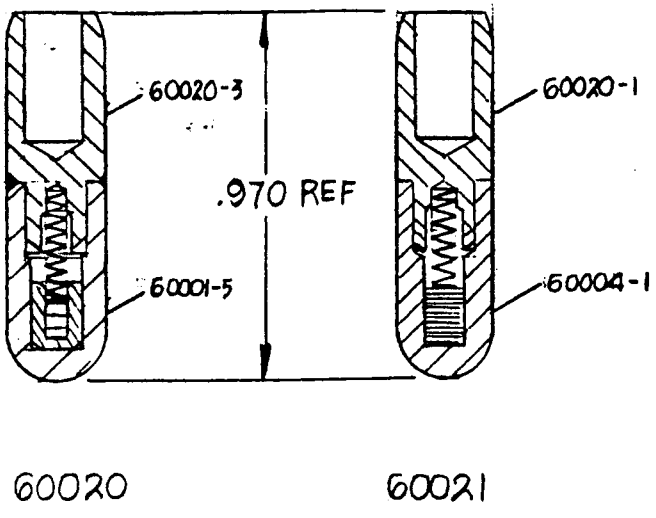
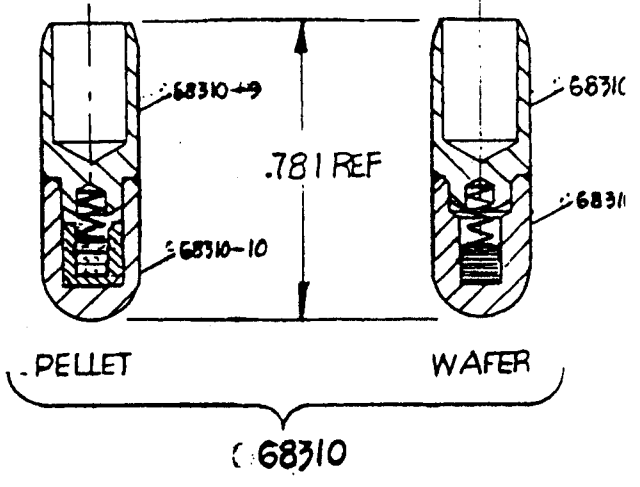
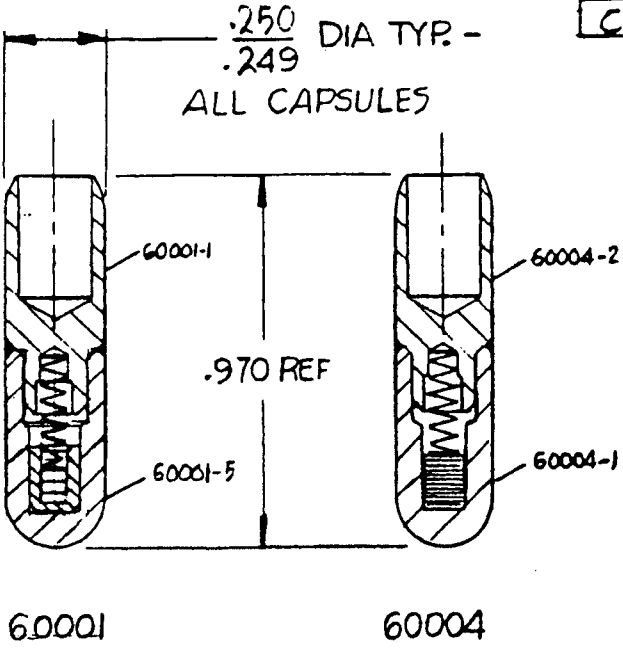
192
IRIDIUM SOURCE REFERENCE

CLASSIFICATION	SIZE	DWG. NO.	RE
	A	60050	C

SCALE 1:1 SHEET 1 OF 3

A60050

REV.	DATE	DESCRIPTION
A	12-18-76	CALLOUT 68310-3 WAS 68310-2 & 66001-2 WAS 866001-2 (ERRORS)
B	9-10-84	60006 REMOVED; ADDED 60020 & 6002
C	1 NOV 84	ADDED 60017 & 60018; ADDED SHT 3

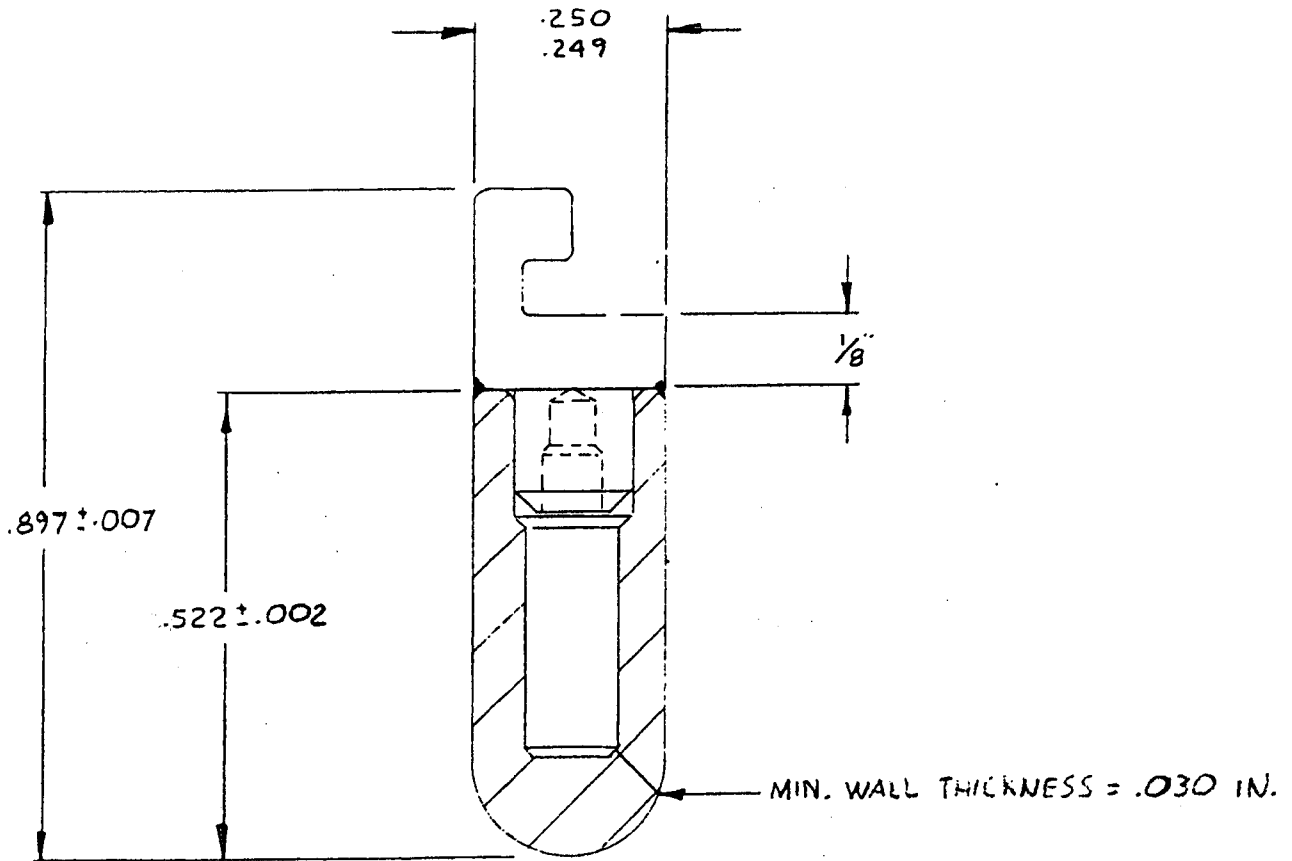


MATERIALS	
FINISH	
DRAWN BY	UNLESS OTHERWISE SPECIFIED TOLERANCES ARE
<i>[Signature]</i> 600 78	.X ±
CHECKED BY	.XX ±
	.XXX ±
APPROVED BY	ANGLES ±
	FRACTIONS ±


TECH OPS
RADIATION PRODUCTS DIVISION
BURLINGTON, MA 01803

DWG TITLE		192	
IRIDIUM SOURCE REFERENCE			
CLASSIFICATION	SIZE	DWG. NO.	RE
	A	60050	C
SCALE 2:1		SHEET 2 OF 3	

REV	ENGINEER	DATE	DESCRIPTION
A	TA	6/15/93	RELEASED TO PRODUCTION 1396



- NOTES: 1. INTERNAL VOID VOLUME TO BE 0.010 ML OR GREATER.
 2. INNER CAVITY DIMS. MAY VARY. METALLIC SPRINGS, SPACERS AND GUARDS WHICH SECURE AND/OR LOCATE RADIOACTIVE MATERIAL WITHIN THE CAPSULE MAY BE USED.

USED ON:		600		RELEASED FOR PRODUCTION ON _____ BY _____	
MATERIALS:		304 stainless steel		AMERSHAM CORPORATION BURLINGTON, MA 01803	
FINISH					
DATE		6/15/93		DWG. TITLE 60006 SERIES CAPSULE DESCRIPTIVE ASSEMBLY	
PREPARED		TA			
ENGINEER					
CHECKED		DN			
APPROVED		6/15/93			
		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE		CLASSIFICATION	
		.X ± 0.1		NA	
		.XX ± 0.01		SIZE	
		.XXX ± 0.005		A	
		ANGLES $\pm 1'$		DWG. NO.	
		FRACT $\pm 1/64$		60024	
				REV	
				A	
				SCALE	
				NTS	
				SHEET	
				OF	



U.S. Department
of Transportation

**Pipeline and
Hazardous Materials
Safety Administration**

East Building, PHH-23
1200 New Jersey Avenue Southeast
Washington, D.C. 20590

CERTIFICATE NUMBER: USA/0154/S-96, Revision 9

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

REGISTERED USER(S):

Drew McCorkle
Century Inspection, Inc.
P.O. Box 59126
Dallas, TX 75229-1126

James E. Peter
Western X-Ray Company
P.O. Box 785
Seiling, OK 73663

Dusty L. Lowery
Group Leader
Los Alamos National Laboratory
A194
LANL
Los Alamos, NM 87545

Gilbert Torres
Deputy Group Leader
Los Alamos National Laboratory
A194
LANL
Los Alamos, NM 87545