

U.S. Department of Transportation

IAEA CERTIFICATE OF COMPETENT AUTHORITY SPECIAL FORM RADIOACTIVE MATERIALS

Pipeline and Hazardous Materials Safety Administration CERTIFICATE USA/0179/S-96, REVISION 13

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 Agency 1 and the United States of America 2 for the transport of radioactive material.

- 1. Source Identification QSA Global, Inc. Series 900 Iridium Capsule.
- 2. Source Description Cylindrical single encapsulation made of Type 304 or Type 304L stainless steel and tungsten inert gas or laser welded. Approximate exterior dimensions are 5.2 mm (0.205 in.) in diameter and 15.5 mm (0.611 in.) in length. Inside dimensions vary, but minimum wall thickness is 0.71 mm (0.028 in.). Construction shall be in accordance with attached QSA Global, Inc. Drawing No. 900 CAP, Rev. C. Source capsules utilizing Type 304 stainless steel must be manufactured after the date of this certificate.
- 3. <u>Radioactive Contents</u> No more than 8.88 TBq (240.0 Ci) of Iridium-192 in solid, metallic form.
- 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, 2025. Previous editions which have not reached their expiration date may continue to be used.

 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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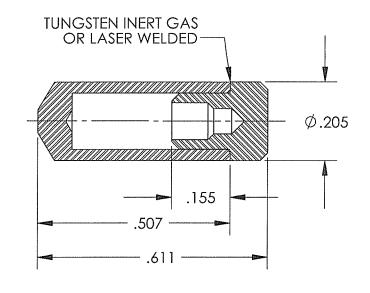
This certificate is issued in accordance with paragraph(s) 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the January 10, 2020 petition by QSA Global, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified By:

William Schoonover

William Schoonover Associate Administrator for Hazardous Materials Safety March 04, 2020 (DATE)

Revision 13 - Issued to authorize the manufacture of source capsules from Type 304 stainless steel and to extend the expiration date.



NOTES:





- 2. MATERIAL: 304 OR 304L STAINLESS STEEL
- 3. INNER CAVITY DIMENSIONS MAY VARY. METALLIC SPACERS, SPRINGS AND GUARDS WHICH SECURE AND/OR LOCATE THE RADIOACTIVE MATERIAL WITHIN THE CAPSULE MAY BE USED
- 4. MINIMUM WALL THICKNESS TO BE 0.028



5. TOLERANCES: FRAC

FRACTIONS ± 1/8 X.X ± 0.12 X.XX ± 0.06 X.XXX ± 0.020

UNLESS OTHERWISE SPECIFIED:

ALL DIMENSIONS ARE INCHES, TOLERANCE ±1/16

QSA GLOBAL

DESCRIPTIVE DRAWING

40 NORTH AVE, BURLINGTON, MA 01803

ERF #	APPROVALS	DATE	TITLE 900 SERIES CAPSULE					
4088	B. kin	28 JAN 20	SIZE	DWG. NO. 900 CAP				REV
4000	M. Flanigan	38 Jan 2020	Α	scale: NONE	SHEET 1	OF	1	