

NRC FORM 7 (01-05-2023) 10 CFR 110	U. S. NUCLEAR REGULATORY COMMISSION APPLICATION FOR NRC EXPORT OR IMPORT LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S) (See Instructions on Pages 4 and 5)	APPROVED BY OMB: NO. 3150-0027 Estimated burden per response to comply with this mandatory collection request: 2.4 hours. This submittal is reviewed to ensure that the applicable statutory, regulatory, and policy considerations are satisfied. Send comments regarding burden estimate to the FOIA, Library, and Information Collections Branch (T-6 A10M), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by email to Infocollects.Resource@nrc.gov , and the OMB reviewer at: OMB Office of Information and Regulatory Affairs, (3150-0027), Attn: Desk Officer for the Nuclear Regulatory Commission, 725 17th Street NW, Washington, DC 20503; email: oir_submission@omb.eop.gov . The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the document requesting or requiring the collection displays a currently valid OMB control number.	EXPIRES: 05/31/2025
-------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------

PART A. FOR NRC USE ONLY	<input checked="" type="checkbox"/> Public OR <input type="checkbox"/> Non-Public	Date Received 8/21/2023
License Number XCOM1361	Docket Number 11006574	Adams Accession Number

PART B. TO BE COMPLETED FOR ALL LICENSES, AMENDMENTS, RENEWALS, OR CONSENT REQUESTS
 (If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)

1. Name and Address of Applicant/Licensee Materion Brush Inc 14710 W. Portage River South Road Elmore, OH 43416	1a. Name of Applicant's Contact Andrea Boris	1b. Applicant's Reference Number 654338
	1c. Office Telephone Number 419-862-4054	1d. Office Facsimile Telephone Number n/a
	1e. Applicant's Email Address andrea.boris@matearion.com	
2. Type of Action Requested	<input checked="" type="checkbox"/> Export (Parts B, C, E) <input type="checkbox"/> Amendment/Renewal Current License Number:	
	<input type="checkbox"/> Import (Parts B, D, E) <input type="checkbox"/> Consent Request (Parts B, C) Current License Number:	
3. Contract Number(s) P19120021	4. First Shipment Date 09/30/2023	5. Last Shipment Date 12/31/2025
	6. Proposed Expiration Date 01/30/2026	

PART C. TO BE COMPLETED FOR EXPORT LICENSES, AMENDMENTS, OR RENEWALS
 (If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)

7. Name(s)/Address(es) of U. S. Suppliers and/or other U. S. Parties to the Export	8. Name(s)/Address(es) of Intermediate Foreign Consignee(s) Doosan Enerbility Co., Ltd 22, DoosanVolvo-ro, Seongsan-gu, Changwon, Gyeongnam, Korea Changwon, South Korea 51711 Phone: +82 55 278 3861 Contact person: Dong Hyun Ahn	9. Name(s)/Address(es) of Ultimate Foreign Consignee(s) Korea Atomic Energy Research Institute 111, Daedeok-daero 989 beon-gil, Yuseong-gu, Daejeon, Republic of Korea Daejeon, South Korea 34057 Phone: +82 42 868 4777 Contact person: Hoan Sung Jung	
7a. Function(s) Performed/Service(s) Provided	8a. Intermediate Use(s) Doosan is in charge of design and manufacturing.	9a. Ultimate End Use(s) KAERI	
10. Description of Radioactive Materials, Sealed Sources, Nuclear Facilities, Equipment, or Components; for Nuclear Equipment include Total Dollar Value of Equipment for Export Minor reactor components listed in Appendix A to Part 110 Item 11 Beryllium Reflector Elements	10a. Maximum Total Volume/Element WGT (KG), or Total Activity (TBq) n/a	10b. Max Enrichment or WGT% n/a	10c. Max Isotope WGT (KG) n/a
11. Foreign origin or obligations by country and, if known, by percentage of maximum total volume (leave blank for byproduct licenses) n/a			

NRC FORM 7(01-05-2023)
10 CFR 110**U. S. NUCLEAR REGULATORY COMMISSION****APPLICATION FOR NRC EXPORT OR IMPORT
LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S) (Continued)**

License Number XCOM1361	Docket Number 11006574	Adams Accession Number	<input checked="" type="checkbox"/> Public OR <input type="checkbox"/> Non-Public
-----------------------------------	----------------------------------	------------------------	------------------------------------------------------------------------------------------

PART D. TO BE COMPLETED FOR IMPORT LICENSES, AMENDMENTS, OR RENEWALS

(If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)

12. Name(s)/Address(es) of Foreign Suppliers and/or other Foreign Parties to Import	13. Name(s)/Address(es) of Foreign or U. S. Intermediate Consignee(s)	14. Name(s)/Address(es) of Ultimate U. S. Consignee(s)	
12a. NRC Export License Number(s) (if applicable)	13a. License Number(s) / Expiration Date(s)	14a. License Number(s) / Expiration Date(s)	
	13b. Intermediate Use(s)	14b. Ultimate End Use(s)	
15. Description of Radioactive Materials, Sealed Sources, Nuclear Facilities	15a. Maximum Total Volume/ Element WGT (KG), or Total Activity (TBq)	15b. Max Enrichment or WGT%	15c. Max Isotope WGT (KG)

16. Foreign obligations (By country and by Percentage of Maximum Total Volume)

PART E. TO BE COMPLETED FOR ALL LICENSES, AMENDMENTS, RENEWALS OR CONSENT REQUEST(S)

(If more space is needed to complete any of the items, use Pages 3-4 first, and then attach additional sheets, if necessary.)

17. Additional Information provided on pages 3, 4, and/or separate sheets? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	17a. Copies of Recipient's Authorizations Provided? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
---------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------

18. Certification:

I, the applicant's authorized official, hereby certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, and that all information provided is correct to the best of my knowledge.

18a. Print Name and Title of Authorized Official Andrea Boris Export Compliance Supervisor	18b. Signature -- Authorized Official Andrea R Boris <small>Digitally signed by Andrea R Boris DN: dc=com, dc=beminc, ou=Materion, ou=Tier2, ou=UserAccounts, ou=ELM, cn=Andrea R Boris, email=Andrea.Boris@materion.com Date: 2023.08.15 12:52:42 -04'00'</small>	18c. Date 8/15/2023
----------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------

NRC FORM 7
(01-05-2023)
10 CFR 110

U. S. NUCLEAR REGULATORY COMMISSION

**APPLICATION FOR NRC EXPORT OR IMPORT
LICENSE, AMENDMENT, RENEWAL, OR CONSENT REQUEST(S) (Continued)**

License Number XCOM1361	Docket Number 11006574	Adams Accession Number	<input checked="" type="checkbox"/> Public OR <input type="checkbox"/> Non-Public
-----------------------------------	----------------------------------	------------------------	------------------------------------------------------------------------------------------

Additional Information (Reference applicable block numbers from page 1 and/or page 2 for each entry)

BLOCK 8: Doosan is in charge of design and manufacturing. However, it is impossible to machine the Beryllium materials in domestic. So, we had ordered this items related to Be materials to Materion. In this case, Doosan plays a role of distributor as well. Doosan is in charge of component design / manufacturing supplier and installation of these item for Ki-jang Research Reactor. KAERI is the operator after completion of construction. Accordingly, KAERI is ultimate end user. Doosan Enerbility Co., Ltd formally known as Doosan Heavy Industries & Co.

BLOCK 9: Doosan is in charge of component design / manufacturing supplier and installation of these item for Ki-jang Research Reactor. KAERI is the operator after completion of construction. Accordingly, KAERI is ultimate end user

BLOCK 10: The products to be supplied will be used as the reflector in the research reactor. Once the completion of beryllium reflector in Materion, intermediate consignee and the end user will only carry out the installation at research reactor site.

The purpose of this product is to use the item as core reflectors in Ki-jang research reactor(KJRR) project. It will perform the mechanical test to evaluate the structural integrity of these parts.

The end user, Korea Atomic Energy Research Institute(KAERI), is currently working on the production of Ki-jang research reactor in Korea. The purpose of this reactor is to make the facility on neutron transmutation doping and produce the semi-conductor.

To use the reflector, our customer(KAERI) has selected the material of Be. Because the material supply and demand are impossible as noted in the answer of question 1, the actual mechanical test has not been performed yet. In summary, additional tests are required to verify the material integrity of the reflector, so additional designs and specimens are required. KAERI is planning the mechanical test of tensile and thermal expansion test.

Previous license (XCOM1335)expired on 1/30/2023. Materion Brush Inc has not completed order/shipments. Customer is in process of revising PO to add new delivery dates along with more reflector elements. The order was placed on a block upon expiration of license, and will remain on block until new license is issued.