

FORM NRC-313 I (3-80) 10 CFR 30		1. APPLICATION FOR: <i>(Check and/or complete as appropriate)</i>	
<b>APPLICATION FOR BYPRODUCT MATERIAL LICENSE INDUSTRIAL</b>		a. NEW LICENSE	
See attached instructions for details.  Completed applications are filed in duplicate with the Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety, and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555 or applications may be filed in person at the Commission's office at 1717 H Street, NW, Washington, D. C. or 7915 Eastern Avenue, Silver Spring, Maryland.		X b. AMENDMENT TO LICENSE NUMBER 13-02841-03 (Amendment #02)	
c. RENEWAL OF LICENSE NUMBER			
2. APPLICANT'S NAME <i>(Institution, firm, person, etc.)</i>  The Dalton Foundries, Inc.  TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION (219)-267-8111		3. NAME AND TITLE OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION  Mr. Boyd Wear, Project Engineer  TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION (219)-267-8111	
4. APPLICANT'S MAILING ADDRESS <i>(Include Zip Code)</i> <i>(Address to which NRC correspondence, notices, bulletins, etc., should be sent.)</i> P.O. Box 1388 Warsaw, IN 46580		5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED <i>(Include Zip Code)</i>  Lincoln & Jefferson Streets Warsaw, IN 46580	
(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)			
6. INDIVIDUAL(S) WHO WILL USE OR DIRECTLY SUPERVISE THE USE OF LICENSED MATERIAL <i>(See Items 16 and 17 for required training and experience of each individual named below)</i>			
FULL NAME		TITLE	
a. Boyd A. Wear		Project Engineer	
b. James A. Priser		Electrical Supervisor	
c. Tom Flees, Melt. Supt.		Safety Manager	
Richard A. d. Gallentine			
7. RADIATION PROTECTION OFFICER		Attach a resume of person's training and experience as outlined in Items 16 and 17 and describe his responsibilities under Item 15.	
Richard A. Gallentine			
8. LICENSED MATERIAL			
I N E  NO.	ELEMENT AND MASS NUMBER  A	CHEMICAL AND/OR PHYSICAL FORM  B	NAME OF MANUFACTURER AND MODEL NUMBER <i>(If Sealed Source)</i>  C
			MAXIMUM NUMBER OF MILLICURIES AND/OR SEALED SOURCES AND MAXIMUM ACTI- VITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME  D
(1)	Cesium-137	Sealed Source	3M Model 4F6S or
(2)			3M Model 4F6P
(3)			
(4)			
DESCRIBE USE OF LICENSED MATERIAL E			
(1)	For use in a Ronan Model X-90-SA-1 Source Holder for a non-contact level measure-		
(2)	ment.		
B506100446 B50510 REG3 LIC30 13-02841-04 PDR			

License Fee Information  
on Next Page

### 9. STORAGE OF SEALED SOURCES

LINE NO.	CONTAINER AND/OR DEVICE IN WHICH EACH SEALED SOURCE WILL BE STORED OR USED. A.	NAME OF MANUFACTURER B.	MODEL NUMBER C.
(1)	Storage in Gaging Device Only	Ronan Engineering Company	X-90-SA-1
(2)			
(3)			
(4)			

### 10. RADIATION DETECTION INSTRUMENTS

LINE NO.	TYPE OF INSTRUMENT A.	MANUFACTURER'S NAME B.	MODEL NUMBER C.	NUMBER AVAILABLE D.	RADIATION DETECTED (alpha, beta, gamma, neutron) E.	SENSITIVITY RANGE (milliroentgens/hour or counts/minute) F.
(1)	None Required	Ronan Representative will place gage in service and make initial				
(2)	survey and wipe test					
(3)						
(4)						

### 11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

<input type="checkbox"/> a. CALIBRATED BY SERVICE COMPANY NAME, ADDRESS, AND FREQUENCY  N/A	<input type="checkbox"/> b. CALIBRATED BY APPLICANT <i>Attach a separate sheet describing method, frequency and standards used for calibrating instruments.</i>  N/A
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### 12. PERSONNEL MONITORING DEVICES

TYPE (Check and/or complete as appropriate.) A	SUPPLIER (Service Company) B	EXCHANGE FREQUENCY C
<input type="checkbox"/> (1) FILM BADGE  <input type="checkbox"/> (2) THERMOLUMINESCENCE DOSIMETER (TLD)  <input type="checkbox"/> (3) OTHER (Specify): _____   	None Required. Radiation levels will be less than 5 mR/hr. at 1 ft. and 100 mR/hr. field is not present. Personnel occupancy in gage vicinity less than 10%.	<input type="checkbox"/> MONTHLY  <input type="checkbox"/> QUARTERLY  <input type="checkbox"/> OTHER (Specify): _____   

### 13. FACILITIES AND EQUIPMENT (Check where appropriate and attach annotated sketch(es) and description(s).)

- ☒ a. LABORATORY FACILITIES, PLANT FACILITIES, FUME HOODS (Include filtration, if any), ETC.
- ☐ b. STORAGE FACILITIES, CONTAINERS, SPECIAL SHIELDING (fixed and/or temporary), ETC.
- ☐ c. REMOTE HANDLING TOOLS OR EQUIPMENT, ETC.
- ☐ d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC. SEE SUPPLEMENT

### 14. WASTE DISPOSAL

a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED  
SEE SUPPLEMENT

b. IF COMMERCIAL WASTE DISPOSAL SERVICE IS NOT EMPLOYED, SUBMIT A DETAILED DESCRIPTION OF METHODS WHICH WILL BE USED FOR DISPOSING OF RADIOACTIVE WASTES AND ESTIMATES OF THE TYPE AND AMOUNT OF ACTIVITY INVOLVED. IF THE APPLICATION IS FOR SEALED SOURCES AND DEVICES AND THEY WILL BE RETURNED TO THE MANUFACTURER, SO STATE.

Gage to be returned to Ronan for disposal after use is terminated.

# INFORMATION REQUIRED FOR ITEMS 15, 16 AND 17

Describe in detail the information required for Items 15, 16 and 17. Begin each item on a separate page and key to the application as follows:

15. RADIATION PROTECTION PROGRAM. Describe the radiation protection program as appropriate for the material to be used including the duties and responsibilities of the Radiation Protection Officer, control measures, bioassay procedures (if needed), day-to-day general safety instruction to be followed, etc. If the application is for sealed source's also submit leak testing procedures, or if leak testing will be performed using a leak test kit, specify manufacturer and model number of the leak test kit.
16. FORMAL TRAINING IN RADIATION SAFETY. Attach a resume for each individual named in Items 6 and 7. Describe individual's formal training in the following areas where applicable. Include the name of person or institution providing the training, duration of training, when training was received, etc.
  - a. Principles and practices of radiation protection.
  - b. Radioactivity measurement standardization and monitoring techniques and instruments.
  - c. Mathematics and calculations basic to the use and measurement of radioactivity.
  - d. Biological effects of radiation.
17. EXPERIENCE. Attach a resume for each individual named in Items 6 and 7. Describe individual's work experience with radiation, including where experience was obtained. Work experience or on-the-job training should be commensurate with the proposed use. Include list of radioisotopes and maximum activity of each used.

Applicant.....
Check No. ....12974
Amount/Fee Category \$40.00
Type of Fee ...Amendment
Date Check Rec'd 9/19/83
Received By [Signature]

## 18. CERTIFICATE

(This item must be completed by applicant)

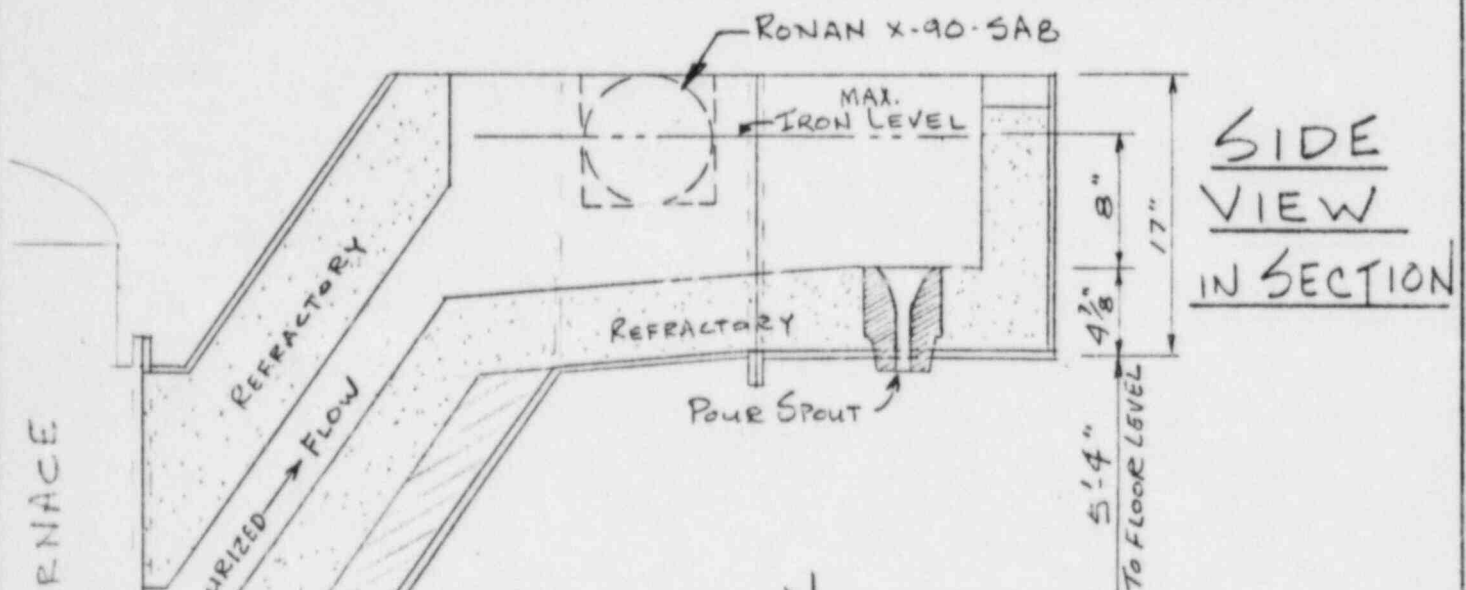
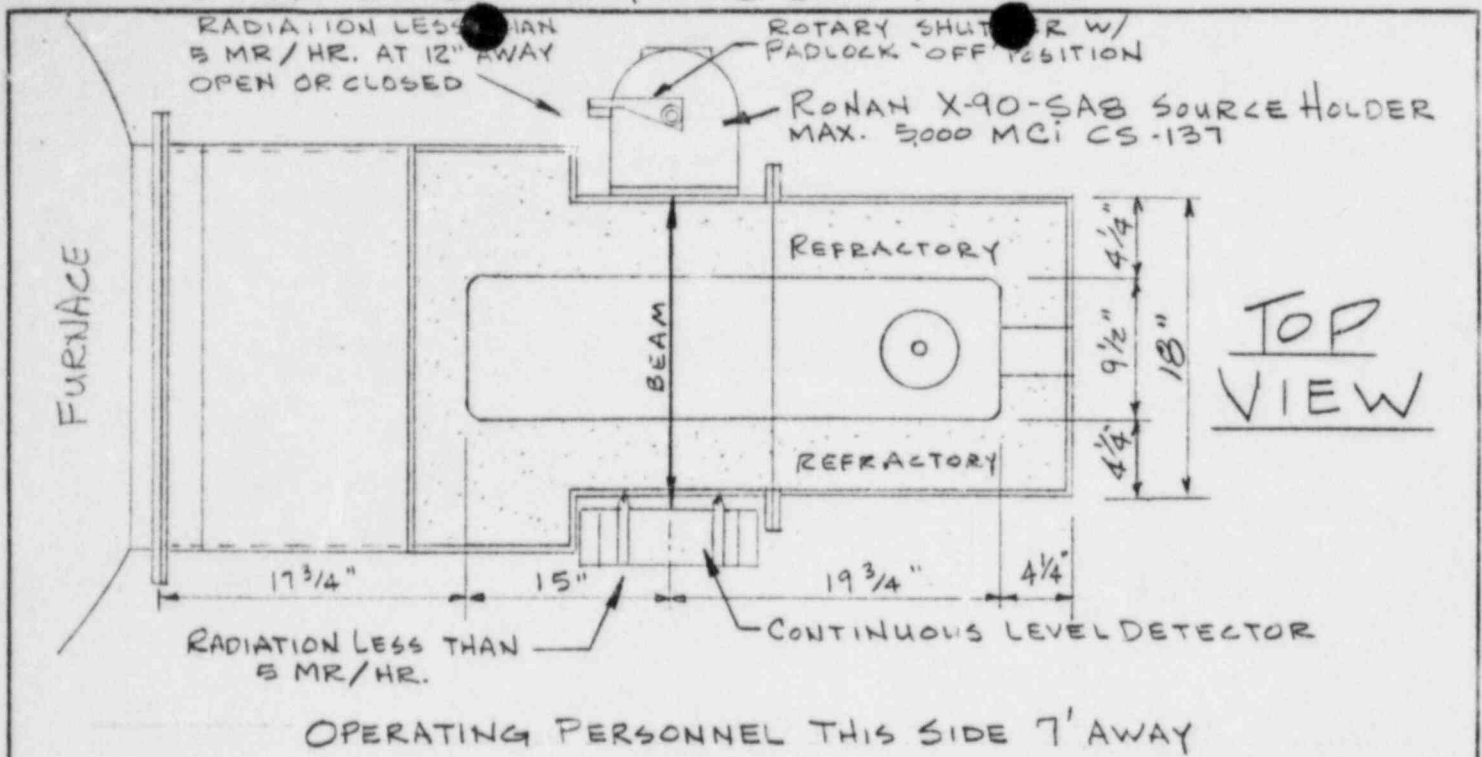
RECEIVED BY LFMD	
Date	9/19/83
Log	Sept 15 111
By	[Signature]
Orig To	[Signature]
Action Compl.	[Signature]

The applicant and any official executing this certificate on behalf of the applicant named in Item 2, certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, Part 30, and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

**WARNING.**—18 U.S.C., Section 1001; Act of June 25, 1948; 62 Stat. 749; makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

a. LICENSE FEE REQUIRED (See Section 170.31, 10 CFR 170) Amendment Fee is \$40.00. Send check with application	b. CERTIFYING OFFICIAL (Signature)
(1) LICENSE FEE CATEGORY: Amendment	c. NAME (Type or print)
(2) LICENSE FEE ENCLOSED: \$ 40.00	d. TITLE
	e. DATE 9/7/83

LESS THAN 10% OCCUPANCY THIS SIDE FOR 20'



### NOTES:

1. DUE TO THE SMALL PHYSICAL SIZE OF THE VESSEL, PERSONNEL ENTRY INTO THE ACTIVE BEAM AREA IS VIRTUALLY IMPOSSIBLE.
2. THE ACTIVE BEAM FROM THE SOURCE IS VERY WELL COLUMNATED WITH A NARROW BEAM.
3. THE R.P.O. WILL BE NOTIFIED IF FOR ANY REASON PERSONNEL WOULD WORKING NEAR THE ACTIVE BEAM SIDE OF THE SOURCE.

THE DALTON FOUNDRIES INC.

WARSAW, INDIANA

Control No. 75571

DATE 9-7-83 BY T.E.H. SUBJECT DISA AUTO-POUR NUCLEAR UNIT PART NO.

I T E M 14

WASTE DISPOSAL

Whenever the source holder is no longer needed, it will be either:

1. removed and stored in a locked room, properly labeled. It will not be replaced in service without prior leak testing, or
2. removed and returned to the manufacturer for disposal.

In either case, the services of the manufacturer's representative will be obtained to supervise removal, reinstallation, and/or packaging for return to the manufacturer.



I T E M 15

RADIATION PROTECTION PROGRAM

Instruction for the safe use of this device will be provided by a Ronan Engineering Company representative at the job site. A radiation protection program as outlined by Ronan will be followed, and the Radiation Protection Officer will be apprised of necessary safety procedures.

Control measures:

- a. The source holders will be received and stored pending arrival of Manufacturer's Field Engineer. The source holders will be installed in the closed position under the supervision of the representative. A written procedure for prevention of entry into the vessel when the source is in the open (source exposed) position will be prepared. This program will be developed in consultation with the manufacturer's representative.
- b. The initial radiation survey will be made by the representative at the time of placing the device in service. An occupancy evaluation will be made by the representative and should film badges appear to be required they will be obtained. Form NRC-3 will be posted and should the radiation survey with the vessel(s) empty reveal radiation fields in excess of 5 mr/hr at 12 inches from the surface of the vessel(s) appropriate warning signs will be posted. Procedures will be adjusted to reduce the total dose to personnel to the minimum reasonably achievable. A copy of the radiation survey and written procedures will be kept on file for future reference.
- c. In case of emergency such as fire or explosion involving apparent damage to the source holder the appropriate Regional Office of Inspection and Enforcement (10 CFR 20 Appendix D), USNRC will be contacted for assistance. The area around the source holder will be barricaded. The services of a manufacturer's representative will be obtained to assist in inspection for damage and local health authorities will also be notified.
- d. Leak test procedure - A test will be performed on the surface of the source holder every six months by the individual user listed in Item 16 of the application in accordance with the instructions of the manufacturer's representative and contained in the gage instruction manual. The wipe test kit to be used is the Ronan Model WK and the wipe will be evaluated for leakage by Ronan Engineering. Should the presence of 0.005 microcuries of removable contamination be detected, the source holder will be withdrawn from service, the Regional Office of the USNRC notified, and the device repaired or replaced by the manufacturer.

I T E M 16

FORMAL TRAINING IN RADIATION SAFETY

One to two days of training by a Ronan Field Engineer at the jobsite during the startup of the gage.

In addition, see attached current license acknowledging Mr. Richard Gallentine as an approved Material Supervisor.

I T E M 17

EXPERIENCE

List previous experience, if any.

See attached current license.