

Attachment 3 (reference: Question #1)

9611220157 961101  
PDR RC \*  
SSD PDR

**General License Document  
Amendment to Operations Manual**

**Dear Customer:**

A general licensee has been granted to you for the use of this device (gauge). Under this general license you must follow the requirements of the Nuclear Regulatory Commission's 10 CFR 31.5 or Agreement State's regulations equivalent to 10 CFR 31.5. We are furnishing you with a copy of the general license in 10 CFR 31.5. If you are in one of the Agreement State's listed below, this device is regulated by the Agreement State under requirements substantially the same as those in 10 CFR 31.5. We recommend contacting your Agreement State Office to obtain a copy of these regulations.

**Agreement State Contact List**

**Alabama**

Division of Radiation Control  
Department of Public Health  
434 Monroe Street  
Montgomery, AL 36130-1701

**California**

Environmental Health Division  
State Department of Health Services  
714/744 P Street  
Post Office Box 942732  
Sacramento, CA. 94234-7320

**Arizona**

Arizona Radiation Regulatory Agency  
4814 South 40th Street  
Phoenix, AZ 85040

**Colorado**

Radiation Control Division 20/82  
Department of Health  
4300 Cherry Creek Drive South  
Denver, CO 80220

**Arkansas**

Division of Radiation Control and  
Emergency Management  
Department of Health  
4815 West Markham Street, Slot 30  
Little Rock, AR 72205-3876

**Florida**

Office of Radiation Control  
Department of Health and Rehabilitative  
Services  
1317 Winewood Boulevard  
Tallahassee, FL 32399-0700

### Georgia

Radioactive Materials Program  
Department of Natural Resources  
4244 International Parkway, Suite 114  
Atlanta, GA 30354

### Illinois

Department of Nuclear Safety  
1035 Outer Park Drive  
Springfield, IL 62704

### Iowa

Bureau of Environmental Health  
Iowa Department of Public Health  
Lucas State Office Building  
Des Moines, IA 50319

### Kansas

X-ray & Radioactive Materials  
Control Section  
Department of Health & Environment  
Bureau of Environmental  
Health Service  
109 SW 9th Street  
Topeka, KS 66612

### Kentucky

Radiation Control Branch  
Cabinet for Human Resources  
275 East Main Street  
Frankfort, KY 40621-1000

### Louisiana

Radiation Protection Division  
Office of Air Quality and  
Radiation Protection  
7290 Bluebonnet Road  
Post Office Box 82135  
Baton Rouge, LA 70884-2135

### Maryland

Radiological Health Program  
Office of Toxics, Environmental Science  
and Health (TESH)  
Department of the Environment  
2500 Broening Highway  
Baltimore, MD 21224

### Mississippi

Division of Radiological Health  
State Department of Health  
3150 Lawson Street  
Post Office Box 1700  
Jackson, MS 39215-1700

### Nebraska

Division of Radiological Health  
Department of Health  
301 Centennial Mall South  
Post Office Box 95007  
Lincoln, NE 68509

### Nevada

Radiological Health Section  
Health Division  
Department of Human Resources  
505 East King Street  
Carson City, NV 89710

### New Hampshire

Radiological Health Bureau  
Division of Public Health Services  
Health and Welfare Building  
6 Hazen Drive  
Concord, NJ 03301-6527

### New Mexico

Bureau of Hazardous and  
Radioactive Materials  
Water and Waste Management Division  
Department of Environment  
Post Office Box 26110  
Santa Fe, NM 87502

### New York

Bureau of Environmental  
Radiation Protection  
Department of Health  
2 University Place  
Albany, NY 12203

### North Carolina

Division of Radiation Protection  
Department of Environment, Health  
and Natural Resources  
Post Office Box 27687  
Raleigh, NC 27611-7687

### North Dakota

Division of Environmental Engineering  
Department of Health  
1200 Missouri Avenue, Room 304  
Post Office Box 5520  
Bismarck, ND 58502-5520

### Oregon

Radiation Control Section  
State Health Division  
Department of Human Resources  
800 NE Oregon Street #21  
Portland, OR 97214-0450

### Rhode Island

Division of Occupational and  
Radiological Health  
Department of Health  
203 Cannon Building  
3 Capital Hill  
Providence, RI 02908-5097

### South Carolina

Bureau of Radiological Health  
Department of Health and  
Environmental Control  
2600 Bull Street  
Columbia, SC 29201

### Tennessee

Division of Radiological Health  
L&C Annex, Third Floor  
401 Church Street  
Nashville, TN 37219-5404

### Texas

Bureau of Radiation Control  
Department of Health  
1100 West 49th Street  
Austin, TX 78756-3189

Utah

Division of Radiation Control  
Department of Environmental Quality  
168 North 1950 West  
Post Office Box 144850  
Salt Lake City, UT 84114-4850

Washington

Division of Radiation Protection  
Department of Health, LE-13  
Airdustrial Center Building #5  
Post Office Box 47827  
Olympia, WA 98504-7827

The following is the general license as written in 10 CFR 31.5:

- (a) A general license is hereby issued to commercial and industrial firms and research, educational and medical institutions, individuals in the conduct of their business, and Federal, State or local government agencies to acquire, receive, possess, use or transfer, in accordance with the provision of paragraphs (b), (c) and (d) of this section, byproduct material contained in devices designed and manufactured for the purpose of detecting, measuring, gauging or controlling thickness, density, level, interface location, radiation, leakage, or qualitative or quantitative chemical composition, or for producing light or an ionized atmosphere.
- (b) The general license in paragraph (a) of this section applies only to byproduct material contained in devices which have been manufactured or initially transferred and labeled in accordance with the specification contained in a specific license issued pursuant to Part 32.51 of this chapter or in accordance with the specifications contained in a specific license issued by an Agreement State which authorizes distribution of the devices to persons generally licensed by the Agreement State.
- (c) Any person who acquires, receives, possesses, uses or transfers byproduct material in a device pursuant to the general license in paragraph (a) of this section:
  - (1) Shall assure that all labels affixed to the device at the time of receipt and bearing a statement that removal of the label is prohibited are maintained thereon and shall comply with all instructions and precautions provided by such labels;
  - (2) Shall assure that the device is tested for leakage of radioactive material and proper operation of the on-off mechanism and indicator, if any, at no longer than six-month intervals or at such other interval as are specified in the label; however
    - (i) Devices containing only Krypton need not be tested for leakage of radioactive material, and
    - (ii) Devices containing only Tritium or not more than 100 microcuries of other beta and/or gamma emitting material or 10 microcuries of alpha emitting material and devices held in storage in the original shipping container prior to initial installation need not be tested for any purpose.



- (3) Shall assure that the tests required by paragraph (c)(2) of this section and other testing, installation, servicing, and removal from installation involving the radioactive materials, its shielding or containment, are performed:
- (i) In accordance with the instructions provided by the labels; or
  - (ii) By a person holding a specific license pursuant to Parts 30 and 32 of this chapter or from an Agreement State to perform such activities;
- (4) Shall maintain records showing compliance with the requirements of paragraphs (c)(2) and (c)(3) of this section. The records must show the results of tests. The records also must show the dates of performance of, and the names of persons performing, testing, installing, servicing, and removing from the installation radioactive material and its shielding containment. The licensee shall retain these records as follows:
- (i) Each record of a test for leakage of radioactive material required by paragraph (c)(2) of this section must be retained for three years after the next required leak test is performed or until the sealed source is transferred or disposed.
  - (ii) Each record of a test of the on-off mechanism and indicator required by paragraph (c)(2) of this section must be retained for three years after the next required test of the on-off mechanism and indicator is performed or until the sealed source is transferred or disposed.
  - (iii) Each record that is required by paragraph (c)(3) of this section must be retained for three years from the date of the recorded event or until the device is transferred or disposed.
- (5) Upon the occurrence of failure of or damage to, or any indication of a possible failure of or damage to, the shielding of the radioactive material or the on-off mechanism or indicator, or upon the detection of 0.005 microcuries or more removable radioactive material, shall immediately suspend operation of the device until it has been repaired by the manufacturer or other person holding a specific license pursuant to Parts 30 and 32 of this chapter or from an Agreement State to repair such devices, or disposed of by transfer to a person authorized by a specific license to receive the byproduct material contained in the device and, within 30 days, furnish to the Administrator of the appropriate Nuclear Regulatory Commission, Regional Office listed in appendix D of Part 20 of this chapter, a report containing a brief description of the event and the

- remedial action taken;
- (6) Shall not abandon the device containing byproduct material;
  - (7) Shall not export the device containing byproduct material except in accordance with Part 110 of this chapter;
  - (8) Except as provided in paragraph (c)(9) of this section, shall transfer or dispose of the device containing byproduct material only by transfer to persons holding a specific license pursuant to parts 30 and 32 of this chapter or from an Agreement State to receive the device and within 30 days after transfer of a device to a specific licensee shall furnish to the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555 a report containing identification of the device by manufacturer's name and model number and the name and address of the person receiving the device is transferred to the specific licensee in order to obtain a replacement device;
  - (9) Shall transfer the device to another general licensee only:
    - (i) Where the device remains in use at a particular location. In such case the transferor shall give the transferee a copy of this section and any safety documents identified in the label of the device and within 30 days of the transfer, report to the Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, the manufacturer's name and model number of device transferred, the name and address of the transferee, and the name and/or position of an individual who may constitute a point of contact between the Commission and the transferee; or
    - (ii) When the device is held in storage in the original shipping container at its intended location of use prior to initial use by a general licensee.
  - (10) Shall comply with the provision of parts 20.2201 and 20.2202 of this chapter for reporting radiation incidents, theft or loss of licensed material, but shall be exempt from the other requirements of parts 19, 20, and 21 of this chapter.
- (d) The general license in paragraph (a) of this section does not authorize the manufacture or import of devices containing byproduct material.



The following procedures and information is provided to you to ensure the safe use of this device.

### Installation and Servicing

Initial installation of the source housing must be completed by Betacontrol. After initial installation the source housing must only be removed, installed or serviced by individuals specifically authorized by the NRC or an Agreement State to perform these services. This general license does not authorize installation or servicing of this device.

### Labelling

The labels affixed to the device at the time of installation must be maintained in a legible and visible manner.

### Leak Testing

The device must be leak tested on a six (6) month frequency as indicated by the general license (except for Krypton-85 devices)

Leak test kits can be obtained through Betacontrol

The following procedures should be followed when wiping the gauge housing:

1. De-energize the device, so the shutter closes and shields the source. The green light will indicate that the shutter is in the closed (off) position.
2. Using the wiping material supplied with the kit, wipe the external surface of the source holder where contamination would be expected (shutter window, weld seams, edge of bolted plates).
3. Place the wiping material in the appropriate container (being careful not to touch the wiping area to other objects because this would spread contamination, if present).
4. Provide the supplier with the requested information about the source.
5. Send the leak test kit to the supplier for analysis.
6. If results indicate 0.005 uCi or more contamination take device out of service and immediately contact one of Betacontrol's service representatives. Also, a report to the NRC and/or Agreement State Office will need to be filed, if the removable contamination exceeds these levels.

### Testing of On-Off Mechanism

The shutter (on-off mechanism) along with the indicators (lights) must be tested at a six (6) month frequency. The results of these tests must be recorded. When the red light is lit, this indicates the device is in the ON or exposed position. When the green light is lit the device is in the OFF or shielded position. You should record the functioning of the shutter, the lights, the date performed and the individual performing the tests. If a malfunction with the shutter or lights occur, contact one of Betacontrol's service representatives. The changing of a burned out light bulb can be performed by your personnel.

### Emergency Procedures

To ensure all employees at your facility are safe from any possible radiation hazard during an accident (fire, explosion, etc.) directly or indirectly involving this device the following procedures should be posted and followed:

If a malfunction, accident, or damage occur to a nuclear gauge take the following steps:

1. Cease work immediately.
2. If the gauge has been partially damaged or destroyed, keep people at least 20 feet away or rope off the area at 20 feet.
3. Notify the Radiation Safety Officer or supervisor, immediately after isolating the area.
4. Contact one of Betacontrol's service representatives for additional assistance.
5. In the case of a fire or explosion inform the fire department personnel of the presence of the nuclear gauge.
6. In the case of any accident or fire, do not use the gauge until any damage or damage to the gauge is assessed.
7. If required, notify the NRC and/or Agreement State.

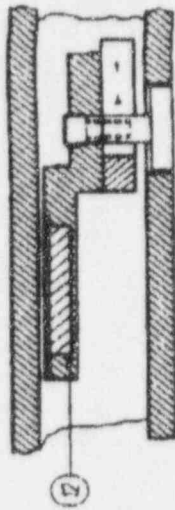
This information has been provided to assist your facility in maintaining exposures "as low as is reasonably achievable" ALARA. If at anytime you have questions or concerns please contact one of our service representatives.

Schnitt A-A  
Sichtung "in"  
"closed" position  
("abgeschlossen")

Schnitt A-A  
Sichtung "in"  
"closed" position  
("abgeschlossen")

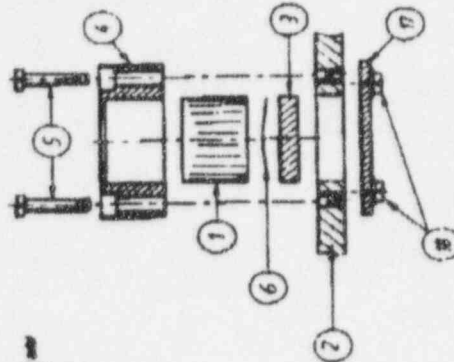
Schnitt B-B  
Sichtung "offen"  
"open" position  
("abgeschlossen")

Schnitt B-B  
Sichtung "offen"  
"open" position  
("abgeschlossen")

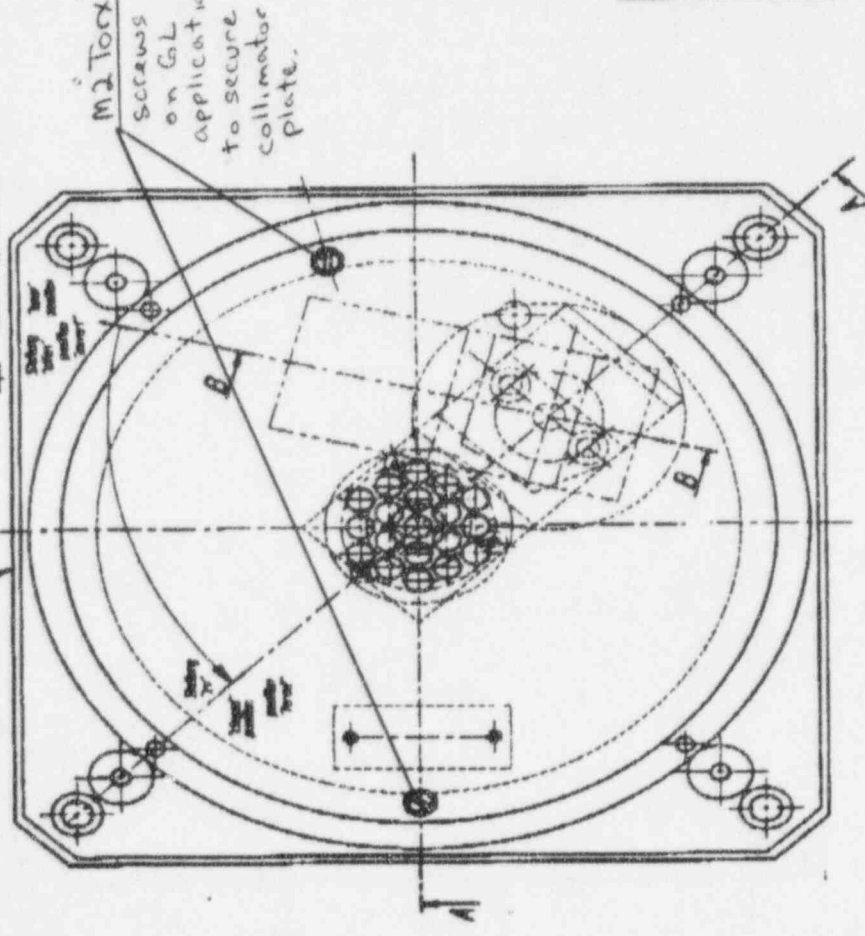


(Drive) magnetisch angeschlossen  
Driving magnetically connected  
(Lancement) électriquement connecté  
(Launch) electrically connected

1. Source (radioisotope)
2. Drive mechanism
3. Shielding container
4. Lid
5. Locking mechanism
6. Drive mechanism
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1. Source (radioisotope)
2. Drive mechanism
3. Shielding container
4. Lid
5. Locking mechanism
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M2 Torx  
screws  
on G.L.  
application  
to secure  
collimator  
plate.

Exemple  
pour la source "Terre"  
("Example for the source 'Terre'")

betacontrol

Geräteart	26.07.1994	Seite	1/1
Gerät	1.1.1	Seite	1/1
Modell	Aufbauplan Strahlerabschirmung Sr 90		
11	Construction plan of source shielding		
	Plan de construction du blindage de source		

700-5652/3

**REFERENCE LIST - APRIL, 1996**

COUNTRY	CUSTOMER	PLACE
Algeria	E.N.C.P.	Chlef
Australia	Anfor	Oberon/New South Wales
	Laminex Industries	Gympie/Queensland
Austria	Cincinnati Milacron	Wien
	Fritz Egger	St. Johann
	Fepla Hirsch	Wiener Neustadt
	IMS	Innsbruck
	Österreichische Homogenholz	Neudörfel
Belgium	ANL	Wellen
	Dumo Plastics	Roeselare
	Lystex	Comines-Warneton
	Sioen	Aardooie
Brazil	Plasticos York	Sao Paulo
	Providencia	Curitiba
	Replasticos	Manaos
	Vinasto Industrial	Sao Paulo
Bulgaria	VHB Storgozija	Pleven
Cameroon	Kosmoplast	Douala
Canada	Avpex International	Newcastle, Ontario
	Canadian General-Tower	Cambridge
	Panval	Sayabec
	Woodbridge Foam	Toronto
China	Anhui Tyres Plant	Hefei-Anhui
	Changchun Tire Factory	Changchun
	Foshan	Lanshi
	Hangtschou Plastics Factory	Hangtschou
	Hualin Group Equipment Department	Mudanjiang City
	Jinan No. 3 Plastic Factory	Jinan/Shandong
	Luying Plastic	Shantung
	Plastics Factory No. 2	Beijing



COUNTRY	CUSTOMER	PLACE
China (cont)	Shanghai Dakai Plastics	Shanghai
	Shanxi Province Foreign Trade Corp.	Taiynan
	Shaowu Log Yard	Shaowu City
	The Second Abrasive Wheel Factory of China	Zhengzhou
	Tianjin No. 1 Plastics Factory	Tianjin
	Tianju Wei Jin Chemical Factory	Tianjin/He-Ping District
Colombia	Filmtext	Bogotá
	Sintéticos	Medellin
Croatia	Astra OOUR Nasinginpex (Ro Sait)	Udbina
	Koteks	Split
Czech Republic	Mitas	Prague
	Technoexport	Prague
Denmark	Schubert Seals	Horsens
Egypt	Misr Packaging	Cairo
Estonia	Polymeer	Tallinn
Finland	Espe Oy	Kouvola
	Isora Ky	Vammala
	Turo Oy	Kuopio
France	Aérazur	Caudebec-Les-Elbeuf
	Bobet	Le Grand-Quevilly
	CP8 Oberthur	Massy
	Chaignaud	La Rochfoucauld
	Dolfus et Noack	Sausheim
	Dourdin	St. Andre-Lez-Lille
	Elf Aquitaine	Lacq
	EMS Industries	Paris
	Griffine Maréchal	Magny en Vexin
	Hutchinson	Ingrandes-sur-Vienne
	Icoa	Romilly-sur-Seine
	Isoroy	Auxerre and St.-Pierre-sur-Dives



COUNTRY	CUSTOMER	PLACE
France (cont)	Kaysersberg	Louviers
	Morard	Seyssel
	Minignp/Flexico	Hénonville
	Peaudouce	Moyenmoutier
	Pensement Willot	Linselles
	Polykote	St.-Omer-en-Chaussée
	Recticel Langeac	Langeac
	Recticel Louviers	Louviers
	SAA	Sélestat
	Terra Film	Trévoux
Germany	Ackva Kunststoffwerke	Bad Kreuznach
	Agfa-Gevaert	Schrobenhauen
	Akerlund & Rausing	Hochheim/Main
	Alkor	München and Rohrdorf
	ALL-VAC-Folien	Weitnau/Seltmans
	Amawerke	Alfeld
	ATP	Buchenau
	Bamberger Kaliko	Bamberg
	Barmag	Remscheid
	Battenfeld	Bochum
	Bauknecht	Calw
	Beiersdorf	Hamburg
	Bellaplast	Heidesheim
	Benecke	Hannover
	Berstorff	Hannover
	Bischof & Klein	Lengerich
	Breyer Maschinenfabrik	Singen
	Cowplast Coswig	Coswig
	Demag Kunststofftechnik	Nürnberg
	Dickel & Co.	Duisburg
	Dieffenbacher	Eppingen

COUNTRY	CUSTOMER	PLACE
Germany (cont)	Dixie Union	Kempten
	DLW	Delmenhorst
	E-K-Pack	Ermengerst
	Elaston	Waldkraiburg
	ERMAFA	Chemnitz
	Etimex	Dietenheim
	FD Organisationsplastik	Unna
	Fritz Egger	Brilon
	Gebr. Buhl	Ettlingen
	Gefinex	Steffenshagen
	Hänsel Textil	Iserlohn
	HT Troplast	Troisdorf
	Innofol	Rosenheim
	Jovoled	Frankfurt/M.
	Kaupert	Marburg
	Klöckner ER-WE-PA	Erkrath
	Klöckner-Wilhelmsburger	Geesthacht
	Koepp AG	Oestrich-Winkel
	Kraftanlagen	München
	Kronospan	Sandebeck
	Kufner Textilwerke	München
	Maveg	Ratingen
	Maywo	Waltenhofen
	Metzeler Schaum	Memmingen
	monofeinfoilen	Kempten
	Neue Baumwoll-Spinnerei und Weberei Hof	Hof
	Next-Folien	Erxleben
	Nopi	Flensburg
	Nowofol	Siegsdorf
	Olbrich	Bocholt

COUNTRY	CUSTOMER	PLACE
Germany (cont)	Omnifol	Niederzier
	Orbitaplast	Gölsau
	P&E Verpackungen	Kempten
	Paguag	Düsseldorf
	Pattberg	Hattingen
	Polypack	Dresden
	Profol	Halting
	Ramisch Klenewefers	Krefeld
	Recticel	Burkhardttsdorf
	Recticel Deutschland	Bexbach
	Reifenhäuser	Troisdorf
	Renolit	Salzgitter and Worms
	Rondorf	Niederkassel
	Roser	Stuttgart
	Schwabe	Moers
	Schwarz Pharma	Monheim
	Seitz-Filterwerke	Bad Kreuznach
	Karl Sengewald	Halle/Westf.
	Sicht-Pack	Domstetten
	Siempelkamp	Krefeld
	Stahlkontor Weser Lenze	Hameln
	Stahlwerke Peine Salzgitter	Salzgitter
	Tarkett-Pegulan	Frankenthal and Konz
	Troester	Hannover
	Veenendaal	Lichtenfels-Seubelsdorf
	Vereinigte Glaswerke	Aachen
	Wentus	Höxter
	Woywood	München
Great Britain	Beaverfoam Midlands	Stonebroom
	British Vita	Manchester
	James Halstead Flooring Materials	Whitefield

COUNTRY	CUSTOMER	PLACE
Gr. Brit. (cont)	Recticel Manufacturing	Alfreton
	Smith & Nephew Research	Harlow
Greece	Renolit Hellas	Athens
	Viopharm	Athens
Hong Kong	Tins' Industrial	Hong Kong
	Tins' Chemical Industrial	New Territories
Hungary	Borodi Vegi Kombinat	Kazincbarcika
	Hungara Müanyagfeldolgozo Vallalat	Budapest
	Pannonplast	Budapest
	Taurus	Nyíregyháza
India	Caprihans	Bombay
	Extrusions (1985)	Calcutta
	Garware Plastics & Polyester	Aurangabad
	Lupin Polymers	Goa
	Magalam Timber Products	Calcutta
	Royal Cushion (National Leathercloth)	Bombay
	Sanghi Industries	Hyderabad
	Speciality Tissues	New Delhi
Indonesia	PT Speranza Jaya	Jakarta
Iraq	N.C.P.I.	Baghdad
Ireland	AVL Ltd.	Kilcoole
	Semperit	Dublin
Italy	Alcan Alluminio	Brasso
	Alfatex	Velletri
	Amut	Novara
	Eurolastic	Plasticopoli di Peschiera Borromeo
	Gommatex	Prato
	Impianti Continui	Velletrie
	Maples	Masera
	Meccaniche Moderne	Busto Arsizio
	Orsa	Gorta Minore

COUNTRY	CUSTOMER	PLACE
Italy (cont)	Rodolfo Comerio	Solbiate Olona
	Sisa	Gorta Minore
	Snia Technopolimeri	Ceriano Laghetto
	Sogetec	Comons (Gorizia)
	Soteco	Gorizio
Japan	Koike Sangyo	Tokyo
	Okamoto Industries	Shizuoka
	Takiron	Osaka
Korea	Cheil Synthetics	Seoul
	Han-Hwa	Jin-Hae/Kyungham
	Kumho	Kwang-Ju
	Lucky	Cheong-Ju, Naju-City, and Ulsan
	Won Kwang	Chungbuk
	Won Poong Chemical	Seoul
	Yeon Kwang Chemical	Pusan
Liechtenstein	Ludwig Elkuch	Bendem
Macedonia	OPIC	Skopje (formerly Yugoslavia)
Malaysia	Fume Fibreboard	Kuala Lumpur
	Malaysian Fibreboard	Kuala Lumpur
	Nylex	Selangor
Mexico	Megaplast	Mexicali
	Plami	Puebla
	Pyn	Mexico City
Montenegro	Polimlje	Ivangrad (formerly Yugoslavia)
Netherlands	Draka Plastics	Hillegom
	Recticel	Kesteren
	Tedeco	Deventer
	Tetra Pak Moerdijk	Moerdijk
	Van Besouw	Gorle
Norway	Pla-Ma	Vegsund
	Renolit Norge	Moss



COUNTRY	CUSTOMER	PLACE
Norway (cont)	Scancoil	Horten
Phillippines	Moldex Products	Quezon City
Poland	Cefol-Erg	Gumonice
	Gamrat	Jaslo
	Kronopol	Zary
	Polimex	Spanplattenwerke Karlino und Despotovac
	Polspan Spoika	Szczecinek
Portugal	Adreta Plasticos	Mem Martins
	Eurospuma	Espinho
	Hoechst Fibras	Portalegre
	Ipocork	Mozelos
	SIAF	Mangualde
Russia	Elektroisolit	Kotkova
	Kombinat SK	Kasan
	Kombinat Rosija	Kamensk
	P/O Orgstekio	Dzerzhinsk
Serbia	Balkan	Suva Reka (formerly Yugoslavia)
	Sumsko Gazdinstvo "Morava"	Svetozarevo (formerly Yugoslavia)
Singapore	Singapore Plastic Products	Jurong Town
Slovakia	Gumame	Puchov
	Rudy Rijen	Otrokovice
Slovenia	Kuster	Lenart (formerly Yugoslavia)
	Metalna	Maribor
	Plama	Podgrad
South Africa	Bisonboard	Johannesburg
	Romatex Extruded Fabrics	Jacobs
	Vynide	Somerset West
Spain	Aiscondel	Cerdanyola
	Lignotock	Pomino
	Plasticos Elche	Elche
	Pycasa	Barcelona



COUNTRY	CUSTOMER	PLACE
Spain (cont)	Renolit Hispania	Estella
	Tablex	Soria
	Ulgor	Mondragon
	Vinilika	Vitoria
Sweden	Eco-Tapeter	Anneberg
	Filltech R & D	Helsingborg
	Holmsund Golv AB	Holmsund
	Perstorp Antiphon	Frölunda
Switzerland	Alma	Pensier
	F. Büttner	Egg
	Caratsch	Bremgarten
	Gurit-Worbla	Ittigen-Bern
	Habasit	Reinach
	Sika-Norm	Düdingen
Taiwan	China Gulf	Toufen
	Four Pillars	San Chung City/Taipei
	Fu Sun Development	Taipei
	Hsin Yin Machinery	Taichung
	Kaisers Plastics	Taipei
	Nan Ya Plastics Corp.	Kaoushiung and Taipei
	Shine Kon Enterprise	Taipei
Tanzania	S.T.I.P.	El Menzah
Thailand	Daifu Industries	Bangkok
	MDF Planner (Vanachai Group)	Bangkok
	Thai-Nam Plastics	Bangkok
	Thai Modern Plastic Industry	Bangkok
Turkey	Camsan	Ordu
	Mensucat Santral	Istanbul
	Onsa Ambalaj	Yakacik-Istanbul
	Petlas Rubber Industry and Trade Company	Kirsehir

COUNTRY	CUSTOMER	PLACE
U.S.A.	American Profol	Cedar Rapids, IA
	BKL	King of Prussia, PA
	C&M Fine Pack	San Bernadino, CA
	hof textiles	Lincolnton, NC
	Masonite	Cordele, GA
	Northwood Panelboard	Bemidji, MN
	Richter Manufacturing	Visalia, CA
	Tesa Tuck	Sparta, MI
	Wood Fiber Industries	Pilot Rock, OR

Attachment 7 (reference: Question #5)

## 6.2 REPLACING THE COVER FILM

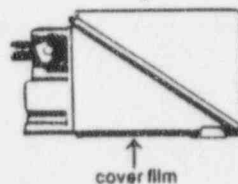
Location of persons performing work:  
around the measuring head at a distance of 0.2 m

### 1. Replacing the cover film on the source unit



- a) Switch off «Mains» push-button.
- b) Loosen cable connection.
- c) Unscrew the source unit from the scanner (3 allen screws M6).
- d) Unscrew the four allen screws (M4) from the yellow ring on the source unit.
- e) Lift off ring and remove defective film.
- f) Fit new film with aluminized coating facing downwards so that it evenly projects over the O-ring diameter on all sides. (The aluminium coating can be measured with the aid of an ohmmeter.)
- g) Weigh down film with a round piece of iron approx. 120 mm in diameter. (Anyone unfamiliar with replacing film will hardly avoid creases without using a fixing weight.)
- h) Fully depress ring and uniformly tighten screws.

### 2. Replacing the cover film on the detector unit



- a) Switch off «Mains» push-button.
- b) Loosen cable connections.
- c) Unscrew the detector unit from the scanner (4 hexagon head cap screws M8) and unhinge it.
- d) Lift off film mounting frame using two screwdrivers.
- e) At a location well away from the measuring head, turn over film mounting frame, unscrew the now visible screws, remove upper film ring, sealing ring and defective film.
- f) Fit new aluminized film so that the electrically nonconductive side points towards the material to be measured. Fit film ring so that holes are aligned with lower film mounting frame.
- g) Mount the film mounting frame by uniformly tightening the fixing screws.
- h) Place sealing ring around film mounting frame, lubricating it slightly turn the mounting frame and fit it into the detector housing by applying uniform pressure to the outer ring.

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Michele Burgess  
US Nuclear Regulatory Commission  
Mail Stop T8F5  
Washington, DC 20555-0001





UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

August 9, 1996

Ray Santoianni  
Service Manager  
betacontrol  
435 Route 202  
P.O. Box 18  
Towaco, NJ 07082

Dear Mr. Santoianni:

This letter is in response to your application dated September 20, 1995, requesting to amend the registration for the Model MK 1.0 transmission gauge. We are in the process of performing a safety evaluation for the device. However, in order to continue our evaluation, the following information is necessary:

1. According to the label provided in your July 15, 1996, facsimile, the label that will be added to devices intended for use under a general license says refer to "...operating and servicing manuals..." Betacontrol's application references only the operations manual. Therefore, please provide a complete copy of the servicing manual. In addition, please provide a complete copy of the operations manual that goes to persons using the device under a general license (GL users) and a copy of the amendment to the operations manual that goes to persons using the device under a specific license (SL users) changing to GL users. The copy of the manual was not attached as listed in your letter dated May 1, 1996.
2. Betacontrol's application and your letter dated May 1, 1996, indicate that there are no design differences between the device intended for use under a specific license and the ones intended for use under a general license. In order to distribute the device to GL users, you must demonstrate that the device design restricts user access to the source. The information that we have on file indicates the use of ordinary fasteners. Restricted access to the source is commonly accomplished through the use of tamper-resistant screws, rivets, or welds. In addition, if a design change is necessary, the quality assurance/quality control procedures submitted in your May 1, 1996, letter should be amended to check for these design changes on new devices being sent to GL users and ones being changed from use by SL users to use by GL users.
3. The information in your file indicates that only limited prototype testing has been performed on the device. Betacontrol's application stated that there were no reported operational problems which caused unnecessary radiation exposures for the device used by SL users. Additional information is required in order to evaluate the safety of the device for use by GL users. Please submit additional prototype testing or details concerning the operational history that clearly demonstrates, during typical use conditions and accident conditions, that there will be no changes to the dose rate around the device, that the safety features of the device (i.e. shutter) will not be affected, and that the source will not be released from its containment. Operational history should address types of failures and failure rates, the time frame considered and the numbers of devices distributed during that time frame. Prototype testing typically includes drop, impact, and vibration. Information in your file indicates that the

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devices have already been prototype tested for temperature ranges of 32°F to 140°F. Please verify that the expected use conditions of the device will not exceed this range.

4. Betacontrol's application provided doses to workers servicing nearby equipment with the device shutter closed and the device pushed out of the way (100 cm) on the mounting track. In addition to this information, we need estimates of doses to workers nearby during normal operation of the device, which demonstrate that workers will not receive doses in excess of 10% of the limits listed in 10 CFR 20.1201(a). Your response should address the bases for the estimates and include the estimated amount of time that a worker would be involved in the activity.
5. In Betacontrol's application, the operating manual amendment lists replacement of the cover film as a service that GL users will perform. Please provide a copy of the written instructions that will be provided to the GL user, an estimate of how often the film would be replaced, and the estimated doses for that activity and the bases for the estimate. Please be aware that the total of the doses discussed in this question and the previous question must still not exceed 10% of the limits listed in 10 CFR Part 20.1201(a). Also, please be aware that these activities should not compromise the tamper-resistant aspect of the device design.
6. Please note that your list of Agreement State contacts is in error. I have enclosed an accurate listing for your use.
7. As requested in your facsimile dated August 8, 1996, we will add the Amersham Model SIF.D1 source as an approved source, when we complete our evaluation of your current request.

Please provide the requested information within thirty (30) days of the date of this letter. If you have any questions, please contact me at (301) 415-5868 or Mr. John W. Lubinski at (301) 415-7868.

Sincerely,

**Original Signed by**

Michele L. Burgess, Mechanical Engineer  
Sealed Source Safety Section  
Medical, Academic, and Commercial  
Use Safety Branch  
Division of Industrial and  
Medical Nuclear Safety  
Office of Nuclear Material Safety  
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