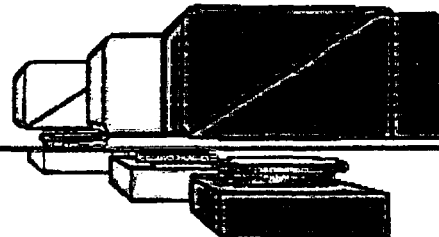


betacontrol of America

PO Box 18 • 425 Route 202 • Towaco, NJ 07082 • Tel.: 973-263-0477 • Fax. 973-263-0477



May 26, 2004

NRC
ATTN.: Nima Ashkeboussi
11555 Rockville
Rockville, MD 20852

Re: Amendment of registration certificate NR-122-D-101-B

Dear Nima,

Betacontrol improved the device MK 1.0. In appliance with NRC regulations we submit the new drawings for your records.

With the modifications we want to keep our product up to date with the needs of our customers and in maintaining exposures "as low as is reasonably achievable" ALARA.

Attached please find the new drawings.

I also ask you kindly to update your files in the matter of the distributor address:

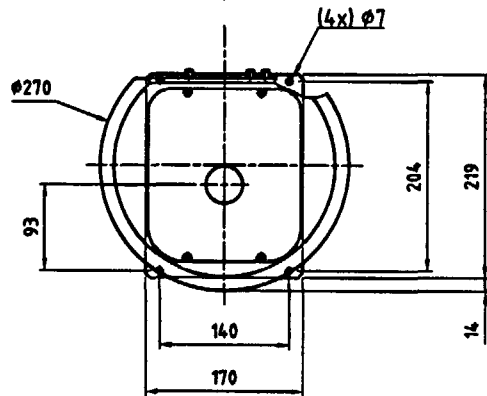
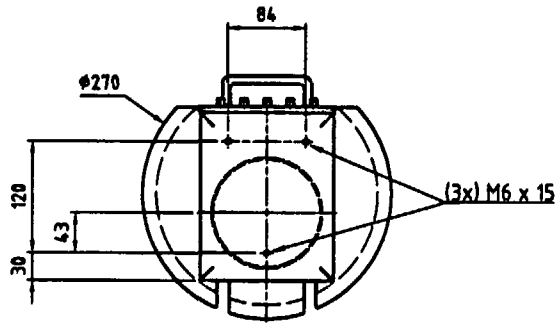
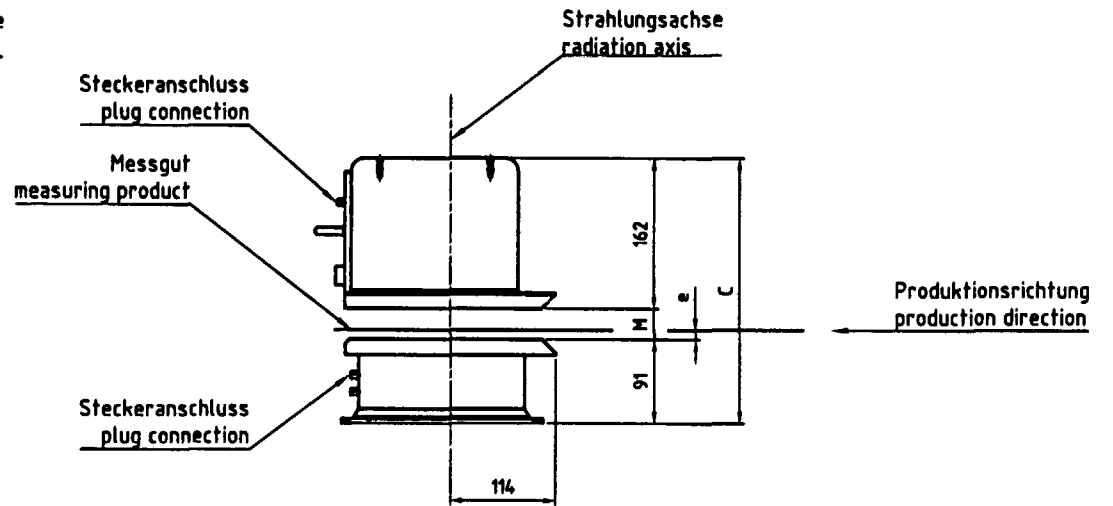
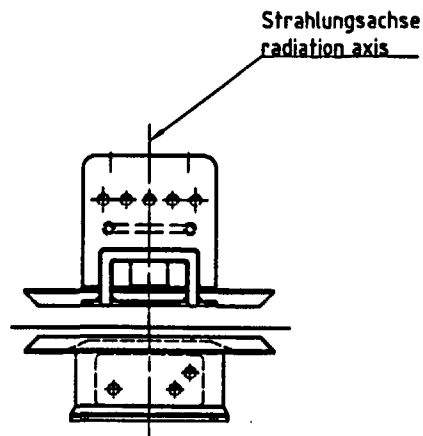
Betacontrol of America
P.O. Box 18
425 Route 202
Towaco, NJ 07082

The ownership has not changed. Betacontrol of America only relocated their office.

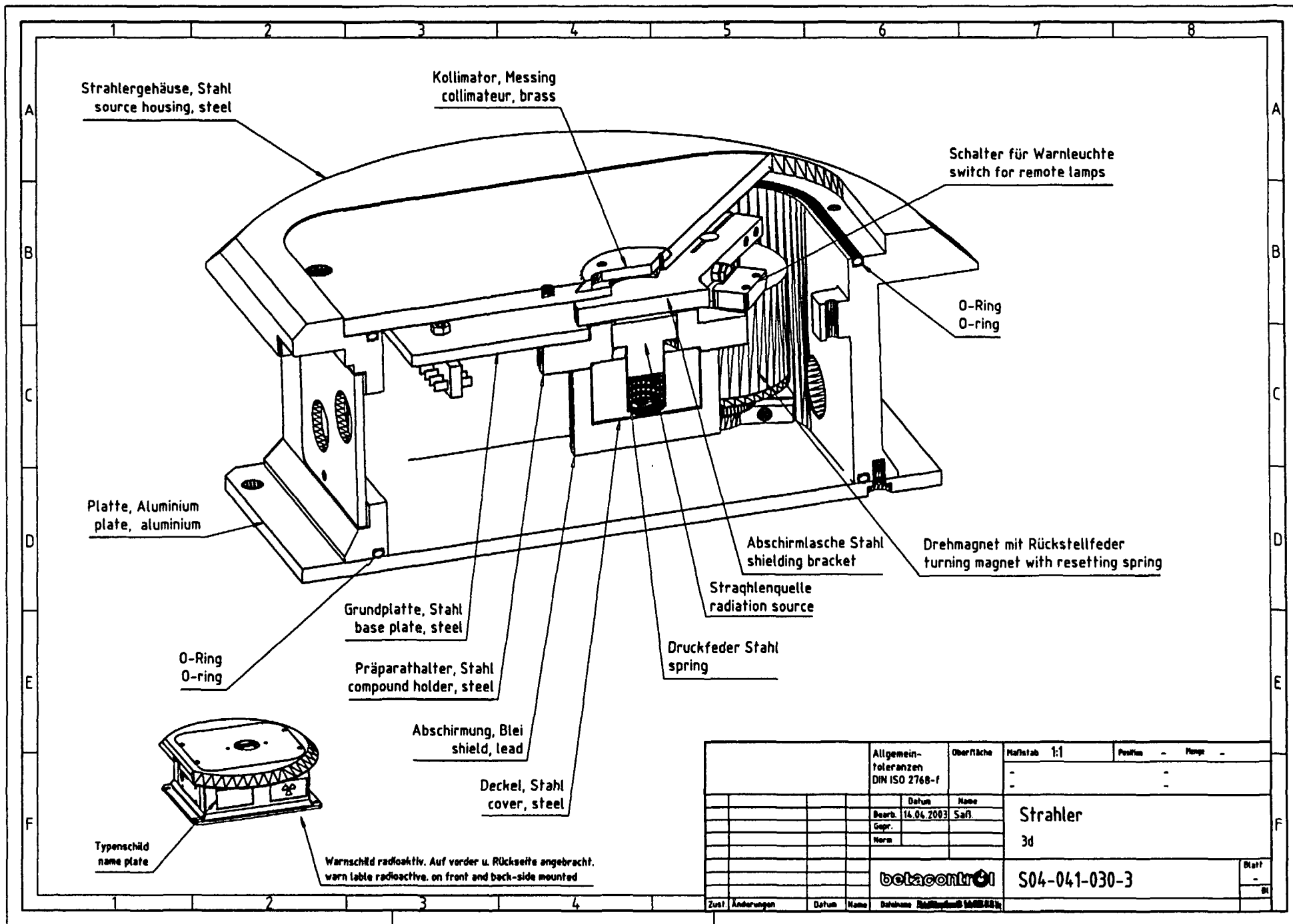
If you need any additional information, please feel free to call me.

Best regards,

Markus Hannig
Manager
Sales & Service

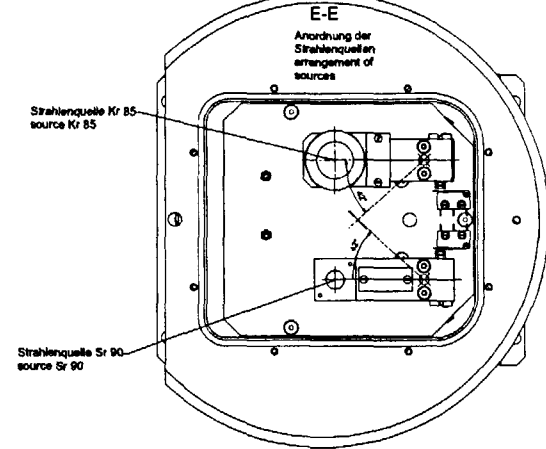
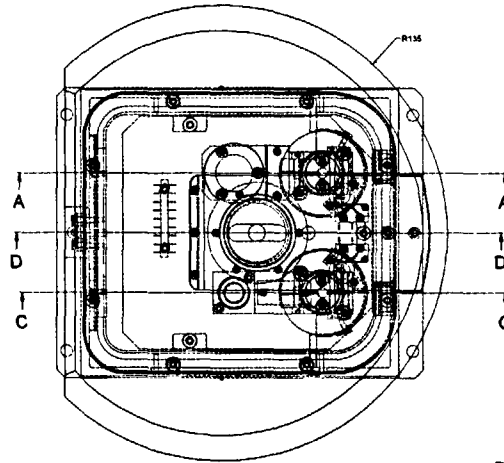
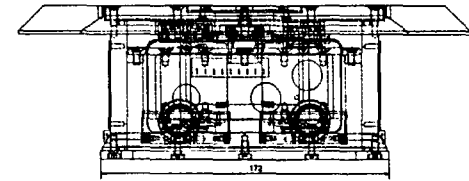
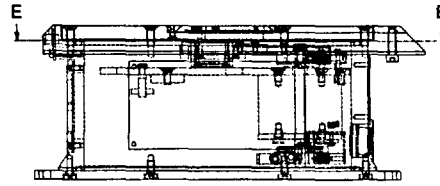
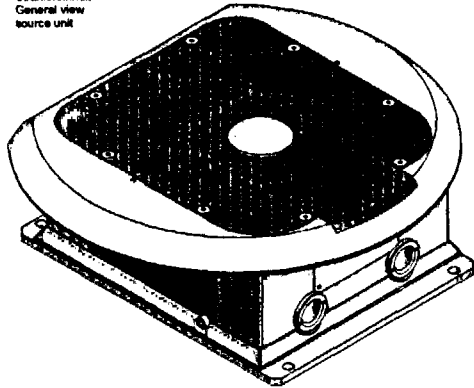


| | | | | | |
|--|---------------------------------|-------------------|-------------|---------------|--------|
| 2 | 33 | 10 | 286 | | |
| 1 | 10 | 6 | 263 | | |
| Variante variant | M Messspalt measuring gap | e | C | | |
| Allgemein- toleranzen DIN ISO 2768-f | | Oberfläche | Maßstab 1:5 | Position | Flange |
| | | | - | - | - |
| | | Datum | Name | | |
| | | Bearb. 04.07.2003 | Saf. | | |
| | | Gepr. | | | |
| | | Norm | | | |
| | | betacontrol | | Sensor | |
| | | | | sensor | |
| | | | | S01-103-001-3 | |
| Zust. Änderungen | | Datum | Name | | Blatt |
| | | | | | - |
| | | | | | Bl |



| | | | | | |
|-------|--|------------|---------------|------------------------------------|---------|
| | Allgemein- toleranzen DIN ISO 2768-f | Oberfläche | Maßstab 1:1 | Position - | Platz - |
| | | | - | - | - |
| | Datum | Name | Strahler | | |
| | Bearb. 14.06.2003 | Saff. | | | |
| | Gepr. | | | | |
| | Norm | | | | |
| | | | 3d | | |
| | | | betacontrol | | Blatt |
| | | | S04-041-030-3 | | - |
| | | | | | Bl |
| Zust. | Änderungen | Datum | Name | Dateiname RadStrahlgeraB 041-030-3 | |

Gesamtansicht
Strahlereinheit
General view
source unit

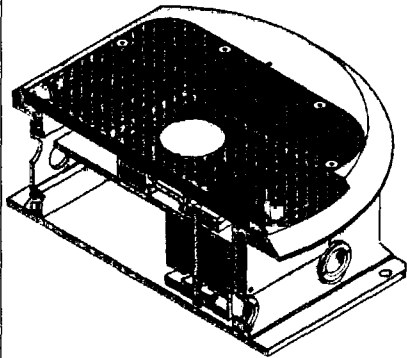
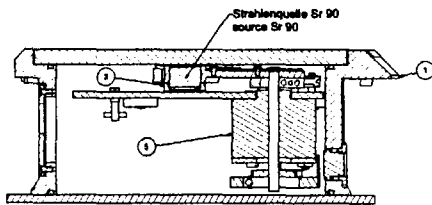


Strahlquelle Kr 85
source Kr 85

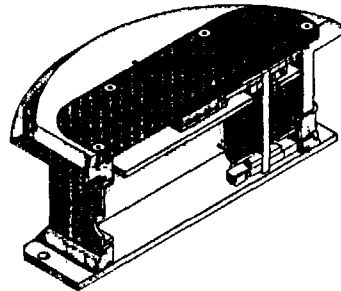
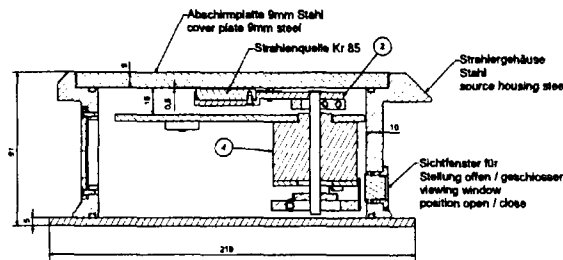
Strahlquelle Sr 90
source Sr 90

E-E
Anordnung der
Strahlquellen
arrangement of
sources

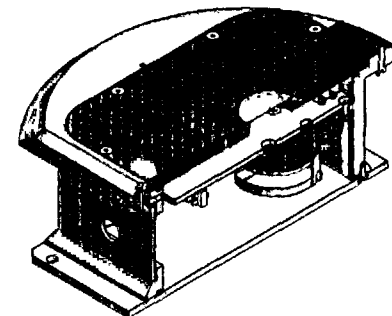
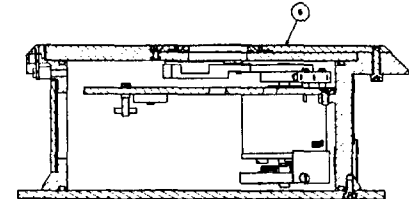
C-C



A-A



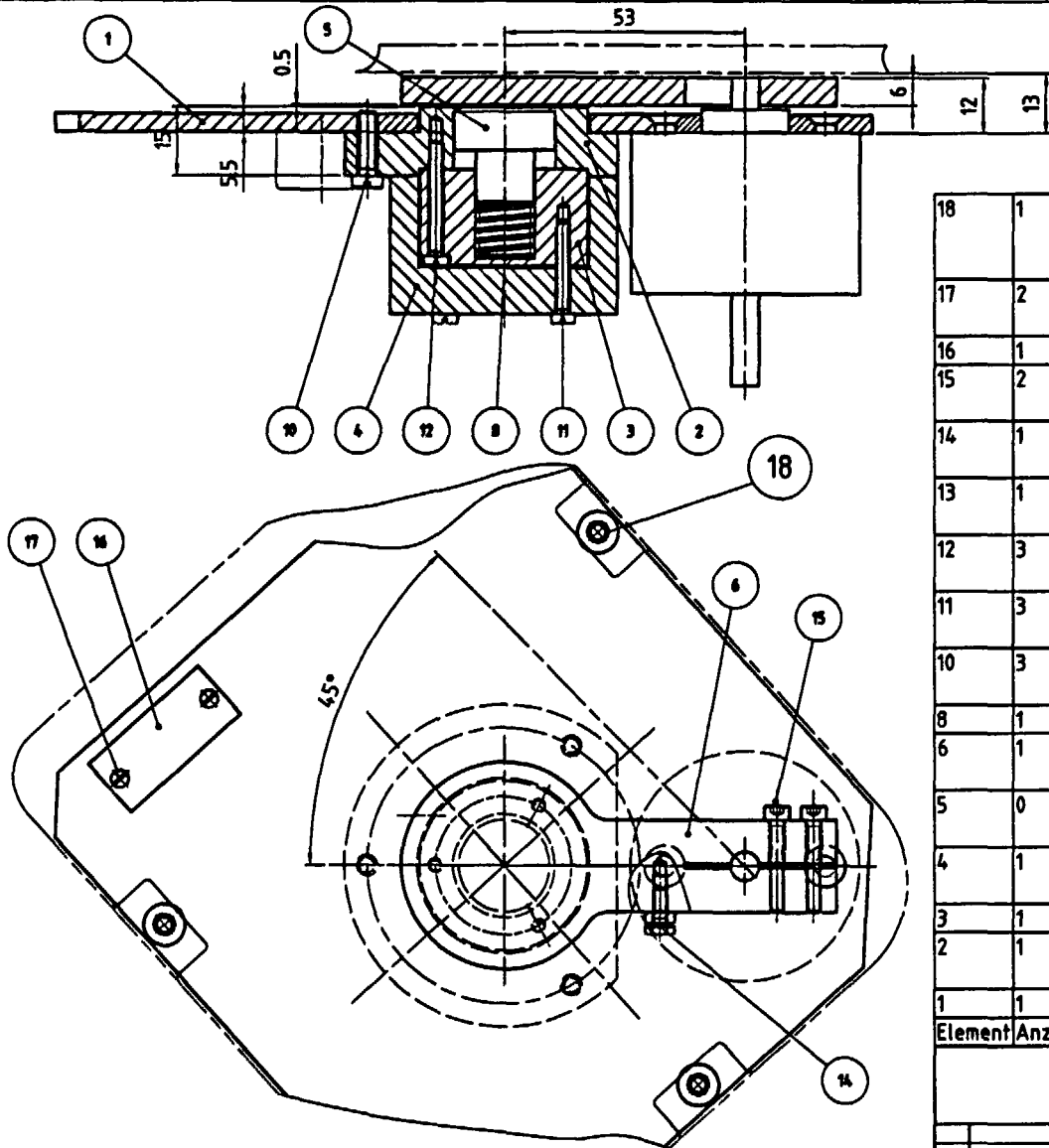
D-D



| QTY | INDEX | BAUTEILNUMMER | BETRIEBSNAME | ANMERKUNGEN |
|-----|-------|---------------|--------------------|--------------------|
| 1 | 1 | S04-4102-1 | Strahlereinheit | Strahlereinheit |
| 1 | 1 | S04-52011 | Strahlgehäuse R | Strahlgehäuse R |
| 1 | 1 | S04-52012 | Strahlgehäuse L | Strahlgehäuse L |
| 1 | 1 | S04-52014 | Strahlquelle Kr 85 | Strahlquelle Kr 85 |
| 1 | 1 | S04-52015 | Strahlquelle Sr 90 | Strahlquelle Sr 90 |
| 1 | 1 | S04-4102B | Strahlereinheit Z | Strahlereinheit Z |


| Strahlereinheit | Strahlereinheit |
|-------------------|-------------------|
| 2 Strahlereinheit | 2 Strahlereinheit |
| 2 Strahlereinheit | 2 Strahlereinheit |
| 2 Strahlereinheit | 2 Strahlereinheit |

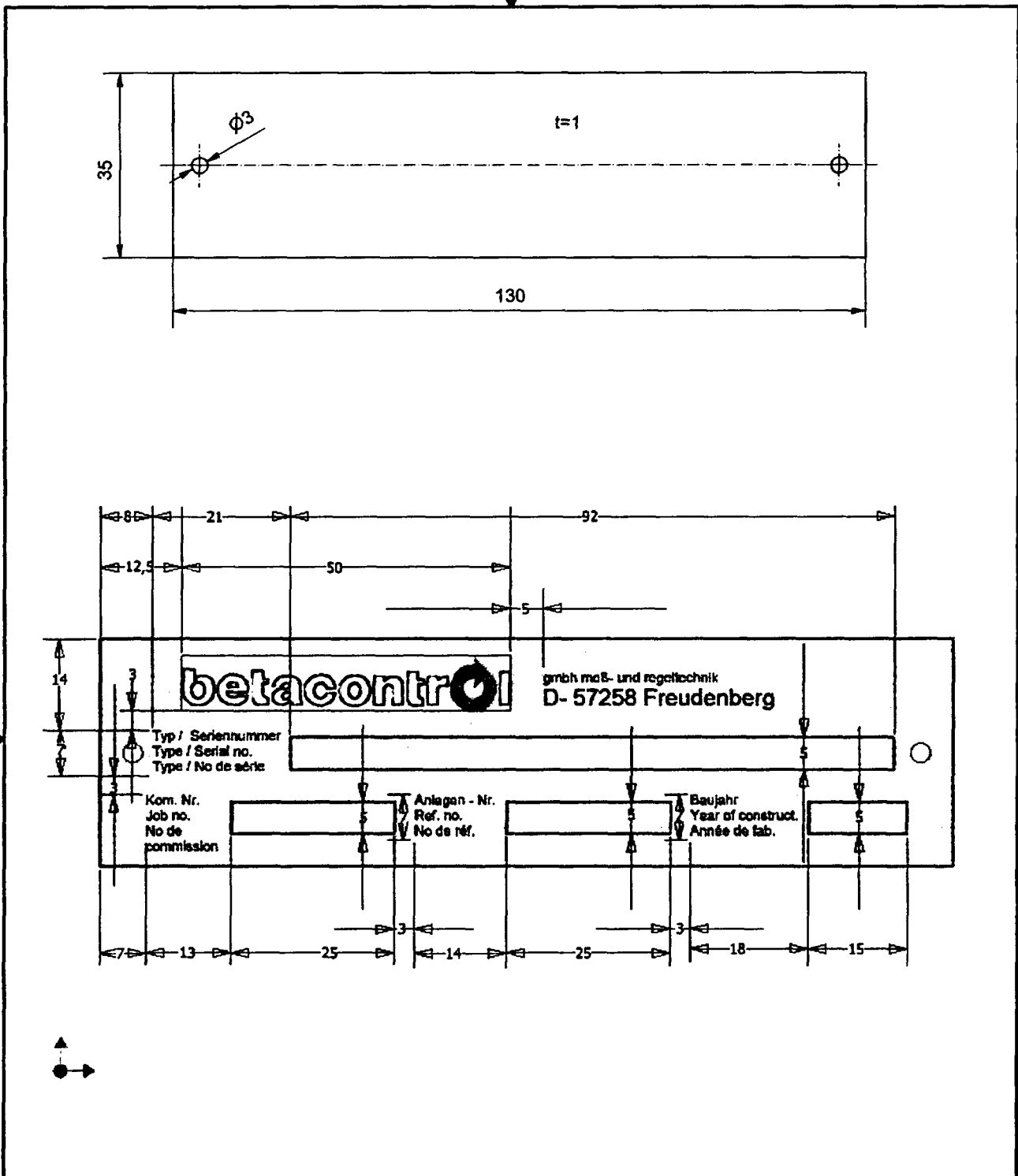
© S04-4102



| | | | | |
|---------|------|--|---------------------|----------|
| 18 | 1 | Innensechskantschraube mit Senkkopf __ Allen countersunk screw | ISO 10642 - M4 x 12 | A2 |
| 17 | 2 | Zylinderschraube mit Schlitz __ Fillister head screw | DIN 912- M2 x 4 | A2 |
| 16 | 1 | Schild Name plate | 700-052-025/4 | A2 |
| 15 | 2 | Zylinderschraube __ Allen head screw | DIN 912 - M3 x 20 | A2 |
| 14 | 1 | Sechskantschraube __ Hex head screw | DIN 933 - M3 x 8 | A2 |
| 13 | 1 | Sechskantmutter __ Hex head screw | DIN 934 - M3 | A2 |
| 12 | 3 | Zylinderschraube mit Schlitz __ Fillister head screw | ISO 1207 - M3 x 25 | A2 |
| 11 | 3 | Zylinderschraube mit Schlitz __ Fillister head screw | ISO 1207 - M3 x 20 | A2 |
| 10 | 3 | Zylinderschraube mit Schlitz __ Fillister head screw | ISO 1207 - M4 x 14 | A2 |
| 8 | 1 | Druckfeder __ Spring | VD-179K | 1.4310 |
| 6 | 1 | Abschirmtasche __ Shielding bracket | S04-052-014-4 | S235JR |
| 5 | 0 | Strahlenquelle __ Radiation source | X.1114 | |
| 4 | 1 | Bleiabschirmung __ Shielding bracket | S04-052-009-4 | Pb |
| 3 | 1 | Deckel Cover | S04-052-008-4 | S235JR |
| 2 | 1 | Präparathalter oben __ Compound holder | S04-052-005-4 | S235JR |
| 1 | 1 | Grundplatte Base plate | S04-041-024-3 | S235JR |
| Element | Anz. | Beschreibung | Standard | Material |

| | | | | | | |
|---------------------------------------|------------|-----------------------|-------|---|------------|---------------|
| Allgemeintoleranzen DIN ISO 2768-f | | Oberflächentoleranzen | | Maßstab 1:1 | Position - | Maße - |
| | | | | | | |
| | | Datum | Name | Strahlerabschirmung Kr. 85 shielding Sr 90 | | |
| | | Bearb. 11.02.2003 | Saf. | | | |
| | | Gepr. 11.02.03 | Ploch | | | |
| | | Norm | | | | |
| betacontrol | | | | S04-52001-3 | | Blatt - B1 |
| Zust. | Änderungen | Datum | Name | betacontrol | | |

| | |
|--|--------------------------------|
|  | CAUTION |
| | RADIOACTIVE MATERIAL |
| | ISOTOPE <input type="text"/> |
| | NUMBER <input type="text"/> |
| | ACTIVITY <input type="text"/> |
| | DATE <input type="text"/> |
| | HALF LIFE <input type="text"/> |

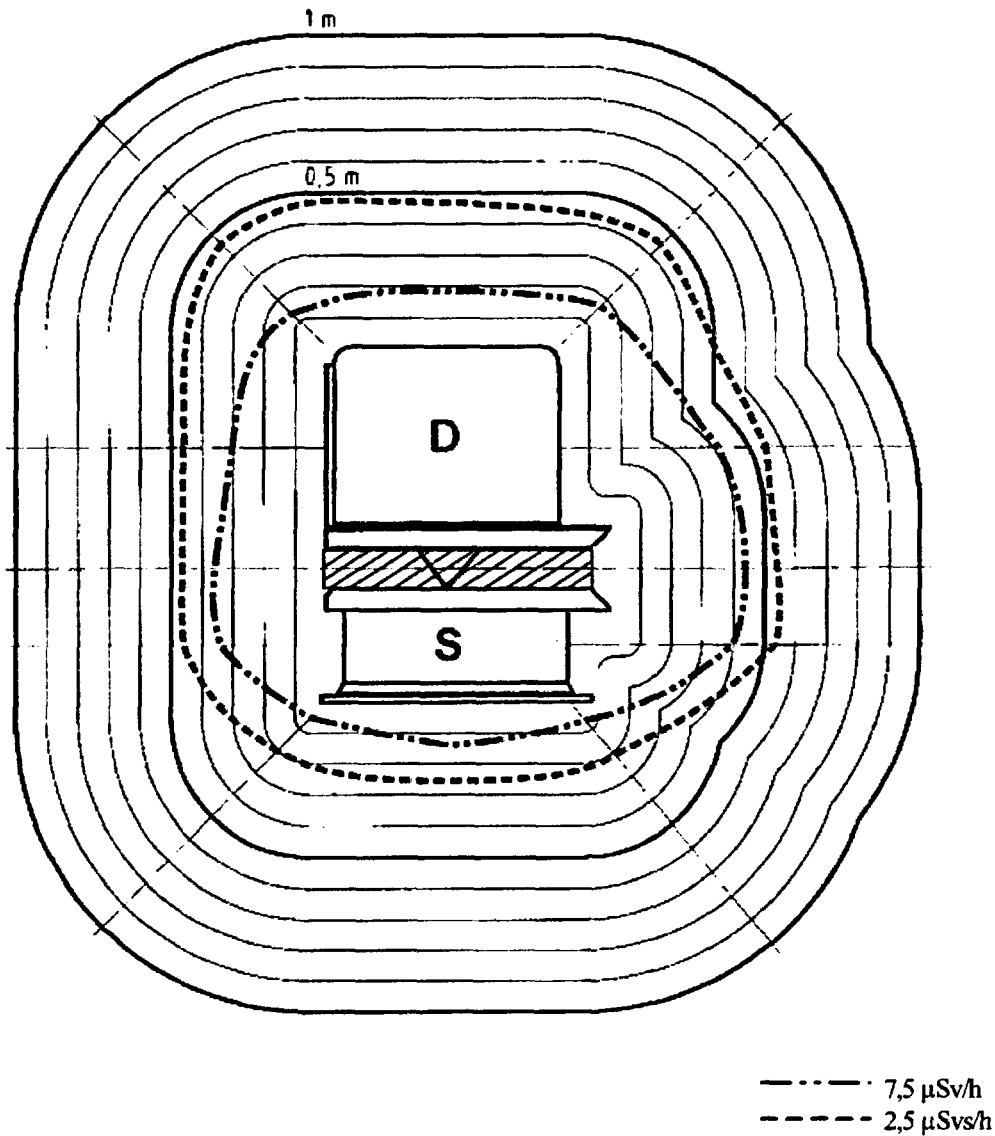


| | | | | | | | |
|--------|------------|--|------|-------------|--|-------------------------|--|
| | | Allgemein- toleranzen DIN ISO 2768-f | | | | AIMg3 | |
| | | Datum | | Name | | Typenschild Messkopf | |
| | | 31.03.2004 | | Saß | | | |
| | | Kontrolliert | | | | | |
| | | Norm | | | | | |
| | | | | S04-041-052 | | 1 | |
| | | | | | | A4 | |
| Status | Änderungen | Datum | Name | | | | |

Isodosiskurven / isodose curves nach DIN 412-1

Strahler im Messbetrieb / source unshielded

Seitliche Ansicht
side view

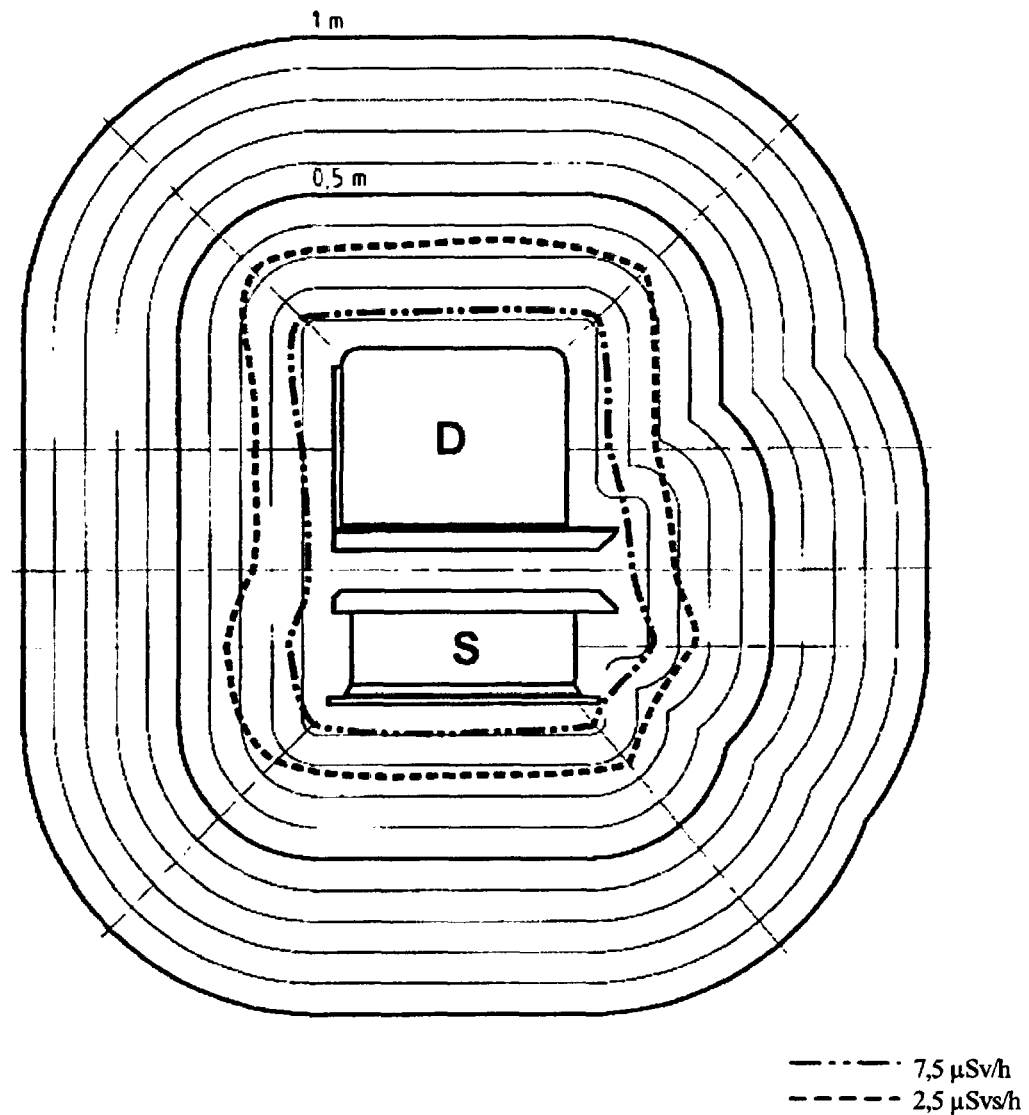


| | | |
|---------------------------------------|---|---------------------------------------|
| Isotop: Kr85 isotope | Messspalt: 10 mm meas. gap | Strahlertyp: X1114 type |
| Aktivität: 3,7 GBq activity | Kollimator: Schlitz 10 x 35 mm slotted collimator | Kr85-3,7-10-01 Bl. 1 |
| Messgerät: babyline | | |

Isodosiskurven / isodose curves nach DIN 412-1

Strahler *abgeschirmt* / source *shielded*

Seitliche Ansicht
side view

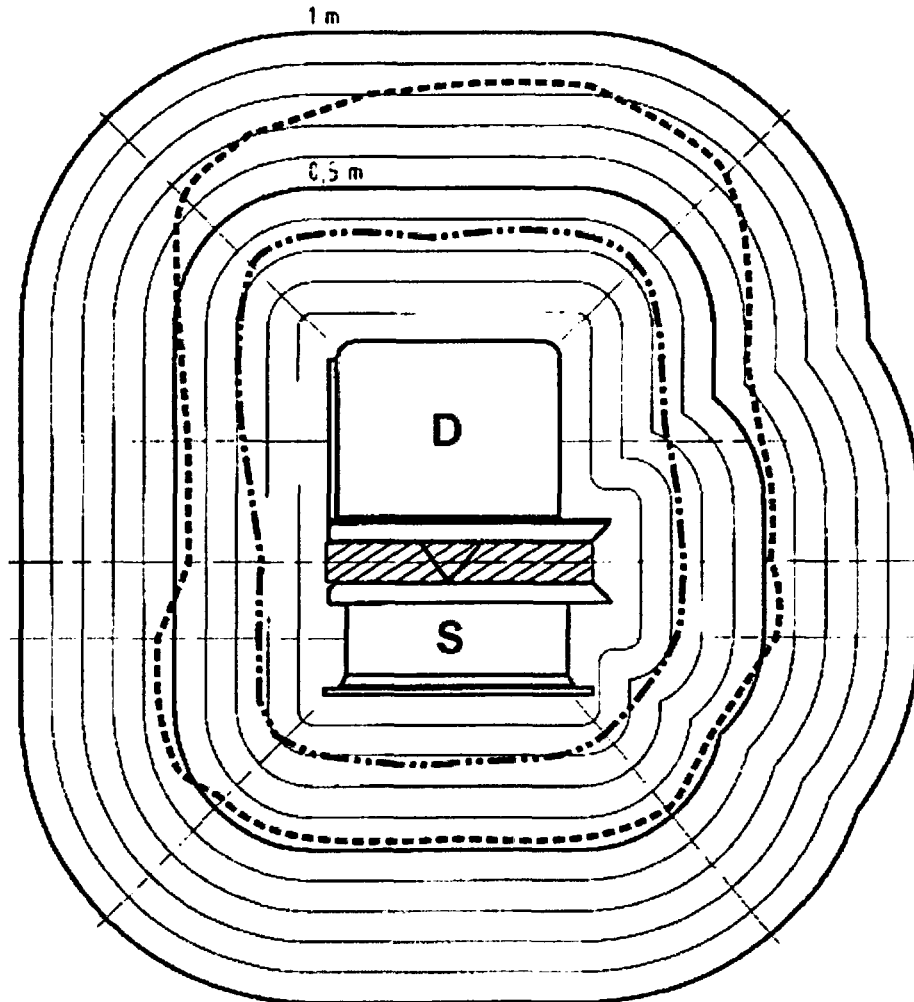


| | | |
|---------------------------------------|---|---------------------------------------|
| Isotop: Kr85 isotope | Messspalt: 10 mm meas. gap | Strahlertyp: X1114 type |
| Aktivität: 3,7 GBq activity | Kollimator: Schlitz 10 x 35 mm slotted collimator | Kr85-3,7-10-01 Bl. 2 |
| Messgerät: babyline | | |

Isodosiskurven / isodose curves nach DIN 412-1

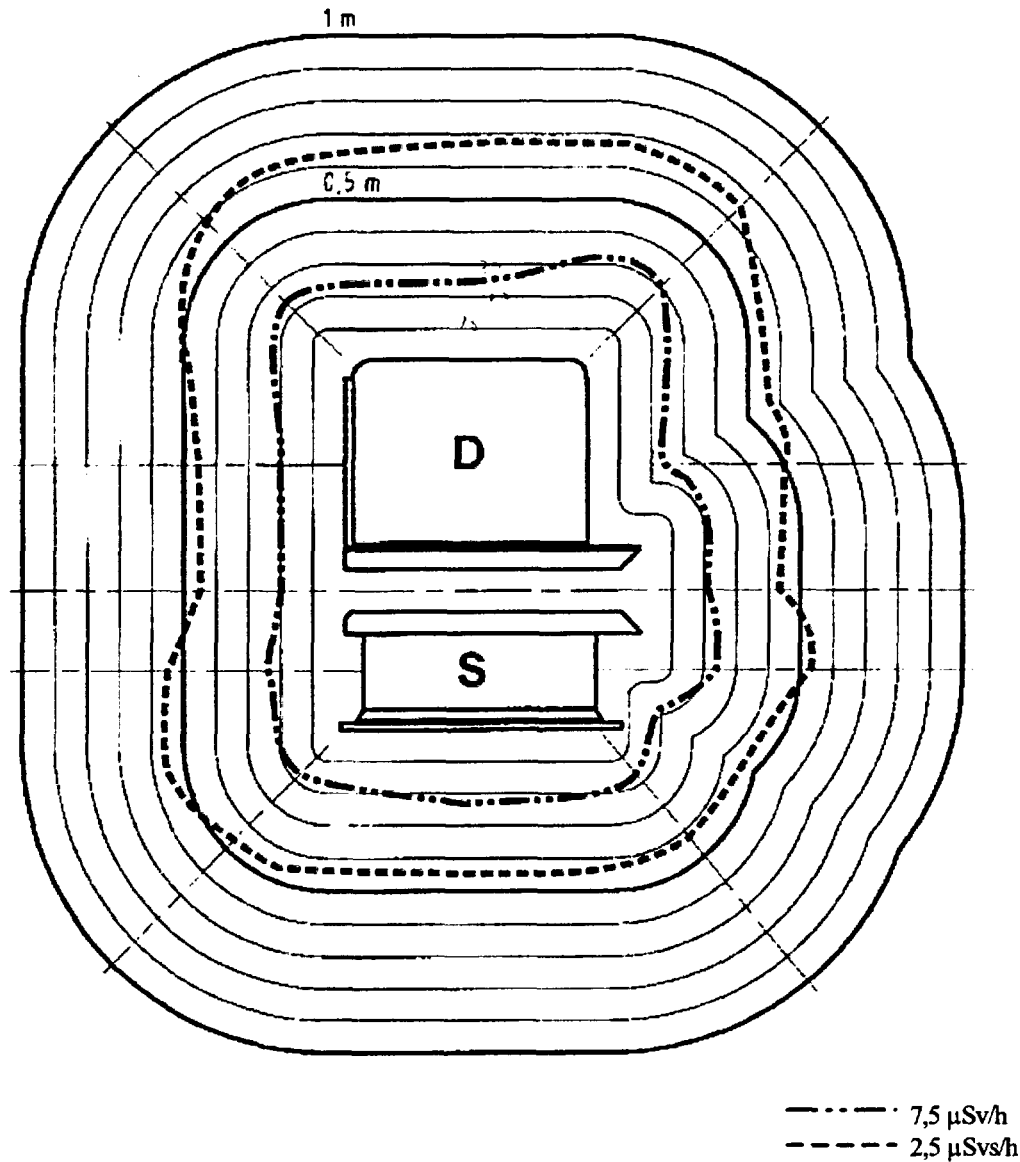
Strahler im *Messbetrieb* / source *unshielded*

seitliche Ansicht
side view



····· 7,5 µSv/h
- - - 2,5 µSv/h

| | | |
|---------------------------------------|---|---------------------------------------|
| Isotop: Kr85 isotope | Messspalt: 10 mm meas. gap | Strahlertyp: X1114 type |
| Aktivität: 9,9 GBq activity | Kollimator: Schlitz 10 x 35 mm slotted collimator | Kr85-9,9-10-01 Bl. 1 |
| Meßgerät: babyline | | |

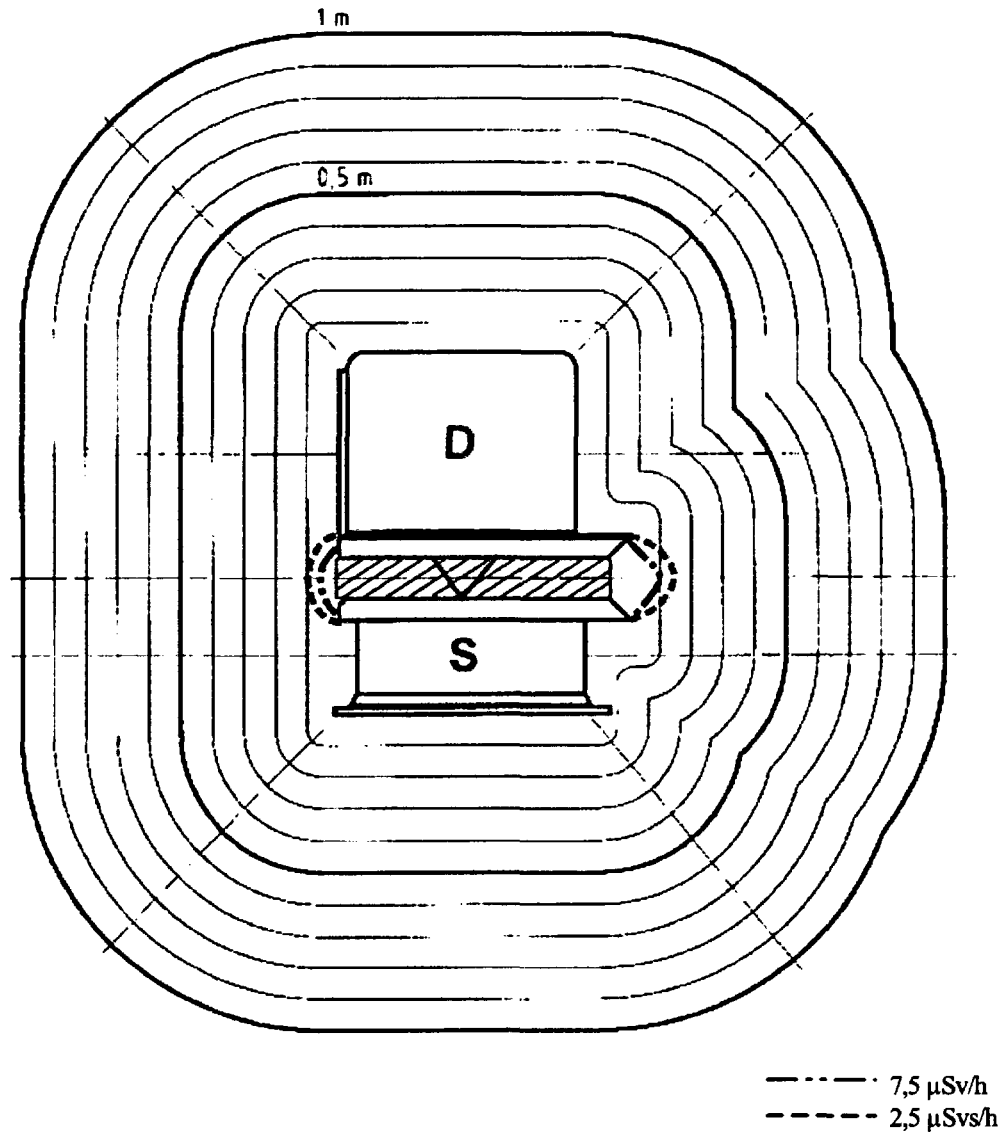
Isodosiskurven / isodose curves nach DIN 412-1**Strahler abgeschirmt / source shielded**seitliche Ansicht
side view

| | | |
|---------------------------------------|---|---------------------------------------|
| Isotop: Kr85 isotope | Messspalt: 10 mm meas. gap | Strahlertyp: X1114 type |
| Aktivität: 9,9 GBq activity | Kollimator: Schlitz 10 x 35 mm slotted collimator | Kr85-9,9-10-01 Bl. 2 |
| Meßgerät: babyline | | |

Isodosiskurven / isodose curves nach DIN 412-1

Strahler im Messbetrieb / source unshielded

Seitliche Ansicht
side view

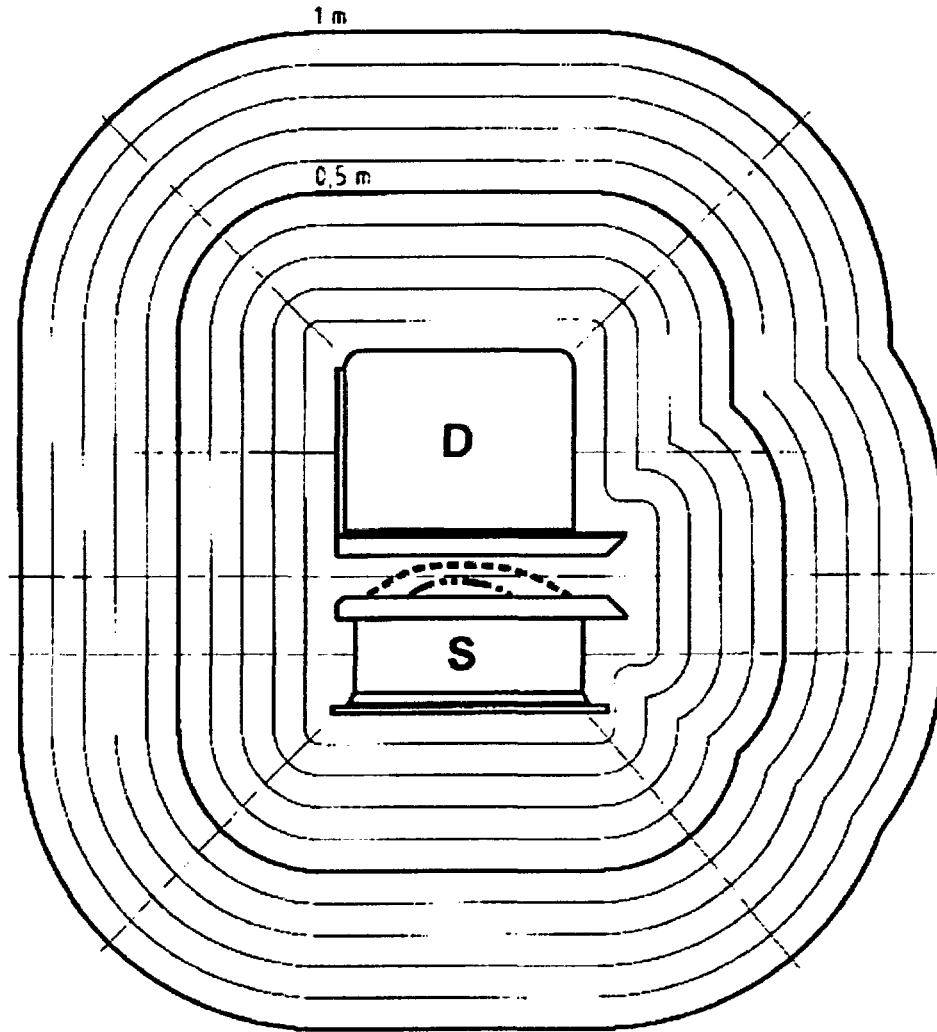


| | | |
|--|---|---|
| Isotop: Pm147 isotope | Messspalt: 10 mm meas. gap | Strahlertyp: VZ-464 type |
| Aktivität: 18,5 GBq activity | Kollimator: Rund slotted collimator | Pm147-18.5-10-01 Bl. 1 |
| Messgerät: babyline | | |

Isodosiskurven / isodose curves nach DIN 412-1

Strahler abgeschirmt / source shielded

Seitliche Ansicht
side view



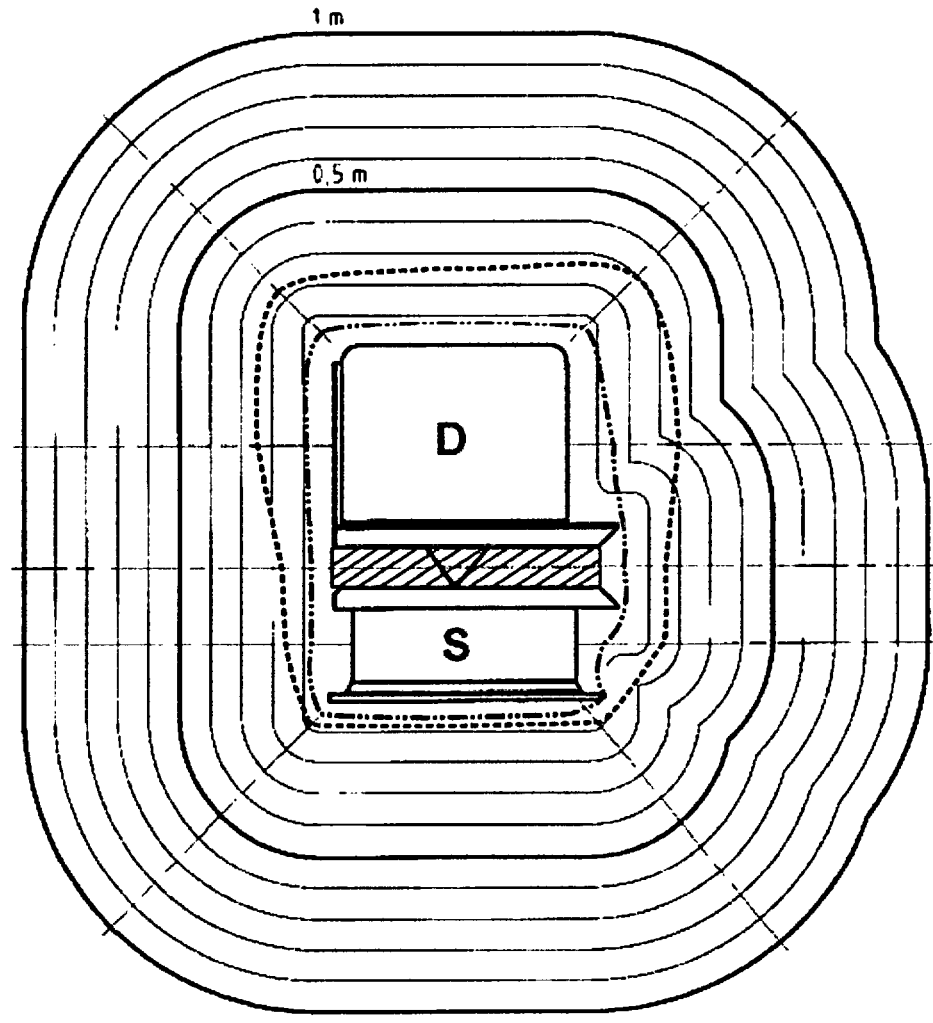
--- 7,5 µSv/h
- - - 2,5 µSv/h

| | | |
|--|---|---|
| Isotop: Pm147 isotope | Messspalt: 10 mm meas. gap | Strahlertyp: VZ-464 type |
| Aktivität: 18,5 GBq activity | Kollimator: Rund slotted collimator | Pm147-18.5-10-01 Bl. 2 |
| Messgerät: babyline | | |

Isodosiskurven nach DIN 412-1 | isodose curves

Strahler im Messbetrieb / source unshielded

seitliche Ansicht
side view



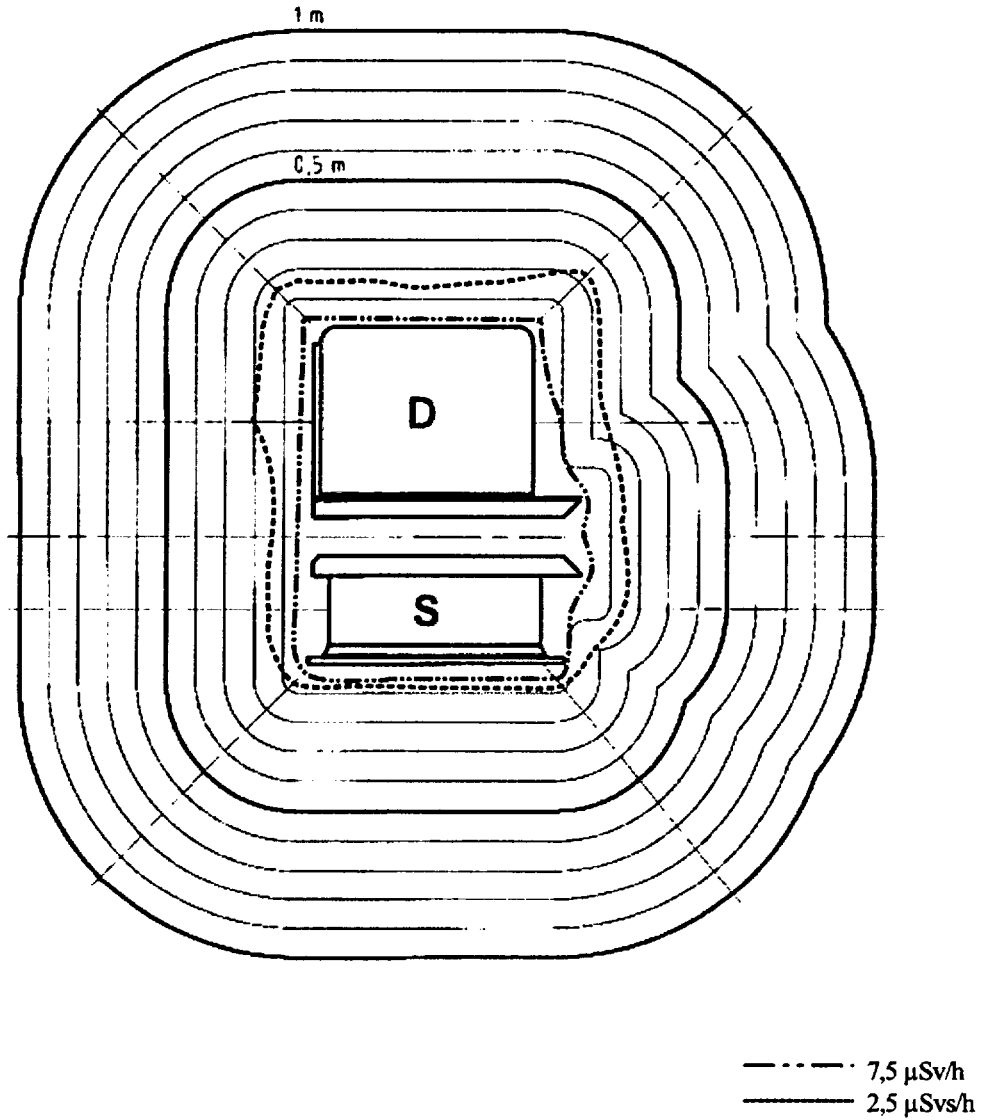
--- 7,5 µSv/h
— 2,5 µSv/h

| | | |
|--|---|---|
| Isotop: Sr.90 isotope | Messspalt: 35 mm meas. gap | Strahlertyp: X117 type |
| Aktivität: 0,37 GBq activity | Kollimator: Schlitz 10 x 35 mm slotted collimator | Sr.90-0,37-35-01 Bl. 1 |
| Meßgerät: babyline | | |

Isodosiskurven nach DIN 412-1 | isodose curves

Strahler *abgeschirmt* / source *shielded*

seitliche Ansicht
side view



| | | |
|--|---|---|
| Isotop: Sr90 isotope | Messspalt: 35 mm meas. gap | Strahlertyp: X117 type |
| Aktivität: 0,37 GBq activity | Kollimator: Schlitz 10 x 35 mm slotted collimator | Sr.90-0,37-35-01 Bl. 2 |
| Meßgerät: babyline | | |