



**NUCLEAR
SHIELDS**



CATALOG

Jan - 2020



NUCLEAR SHIELDS

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SOURCE STORAGE CABINET

SSC1C

Specifications

Finishing material	Coated steel
Shielding material	Lead
Shielding thickness *	25 mm lead
Outside dimensions *	2025 x 672 x 2076 mm (w x d x h)
Inside dimensions *	Drawers: 280 x 460 x 305 mm (w x d x h) Doors: 355 x 380 x 395 mm (w x d x h)
Weight *	+/- 5400 Kg

* We can make this product according to your needs.

Features

- Store all your radioactive materials safely
- Sophisticated access control system
- Small footprint
- Quick & easy installation (also in small spaces)



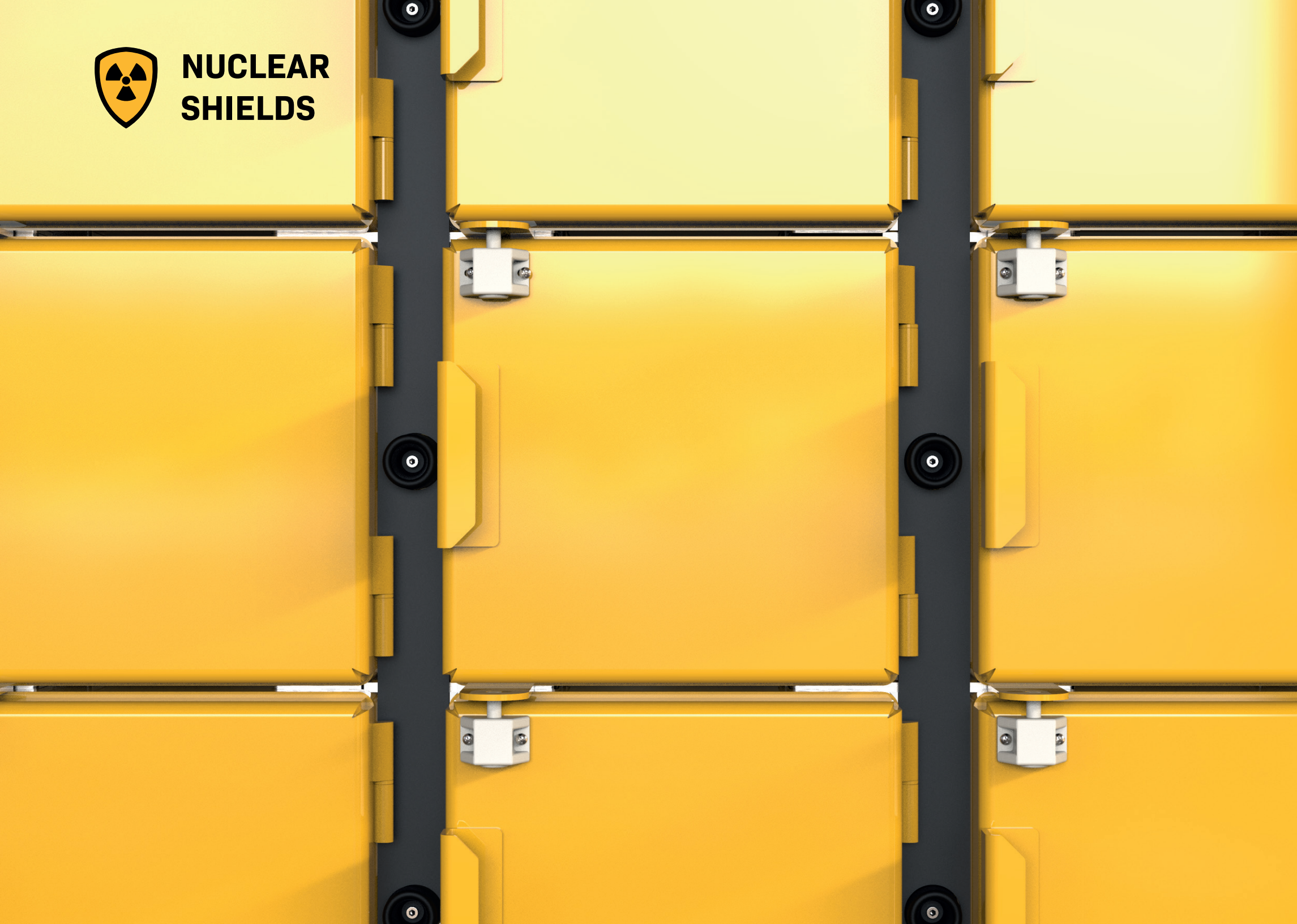
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COMPACT SOURCE STORAGE SAFES

SC1432

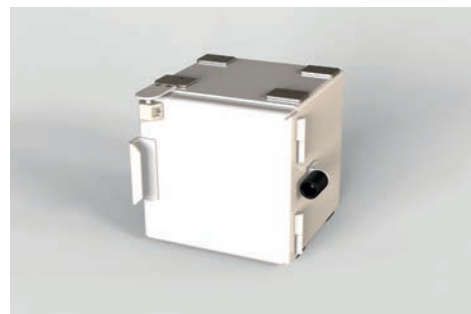
Specifications

Finishing material	Coated steel
Shielding material	Lead
Shielding thickness *	32 mm lead
Outside dimensions *	340 x 345 x 300 mm (w x d x h)
Inside dimensions *	200 x 200 x 200 mm (w x d x h)
Weight *	190 Kg

* We can make this product according to your needs.

Features

- Designed for safely storing radioactive materials
- Small and modular concept
- Can be stacked together or used as a standalone safe
- Lockable with a key
- Available in multiple colors



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STORAGE & TRANSPORT CASKS

SWB1120

Specifications

Finishing material	Coated steel
Shielding material	Lead + steel
Shielding thickness	95 mm lead + 25 mm steel in sides / 72 mm lead + 30 mm steel in bottom + top
Outside dimensions	1000 x 1000 x 1567 mm (w x d x h)
Inside dimensions	660 x 937 mm (diameter x h)
Weight	4.590 K

Features

- Store all your radioactive materials safely
- Designed for overpacking and transportation of 200 liter drums
- Easily picked up with a forklift or lifted by a crane
- Can be fastened to a (remote controlled) trolley on the bottom frame
- Container seals with registration number for your registration system.



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SHIELDED HOTLAB CABINETS

SC121 - SC123 - SC126

Specifications

Finishing material	Stainless steel + HPL
Shielding material	Lead
Shielding thickness	6 / 12.5 / 25 mm
Outside dimensions	730 x 555 x 996 mm (w x d x h)
Inside dimensions	SC121: 435 x 485 x 685 mm (w x d x h) SC123: 360 x 450 x 115 mm (w x d x h) SC126: 130 x 450 x 120 mm (w x d x h)
Weight	280 / 440 / 740 Kg (depending on lead shld.)

Features

- Clean up your hotlab
- Available in multiple storage types
- Available in multiple lead thicknesses
- Clean design for hotlabs
- Available in many HPL colors and designs
- Modular in combination with stainless steel tabletop





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LEAD VIAL PIG

LVP112

Specifications

Finishing material	Coated lead
Shielding material	Lead
Shielding thickness *	25 mm (1")
Outside dimensions *	120 x 94 mm (diameter x height)
Inside dimensions *	70 x 44 mm (diameter x height)
Weight	8.2 Kg

* We can make this product according to your needs.



Features

- Safely store and transport your radioactive materials
- Available in multiple lead thicknesses
- Simple and easy-to-clean design



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LEAD HANDLEBAR CONTAINERS

LSC1160

Specifications

Finishing material	Stainless steel
Shielding material	Lead
Shielding thickness *	60 mm
Outside dimensions *	190 x 250 mm (diameter x height)
Inside dimensions *	50 x 120 mm (diameter x height)
Weight	60 Kg

* We can make this product according to your needs.

Features

- Integrated seal to hermetically close the lid
- Can be locked using two padlocks
- Stainless steel finishing for easy cleaning
- Two lifting eyes can be attached to the container
- Lead casted and not glued for durability



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SHIELDED STORAGE CONTAINERS

LS0070

Specifications

Finishing material	Stainless steel
Shielding material	Lead
Shielding thickness *	35 mm
Outside dimensions *	160 x 260 mm (diameter x height)
Inside dimensions *	68 x 185 mm (diameter x height)
Weight	125 Kg

* We can make this product according to your needs.

Features

- 3 mm stainless steel outside finishing
- Can be fastened with two M6 nuts
- Lead casted and not glued for durability





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MOBILE LEAD CONTAINER

SWB135

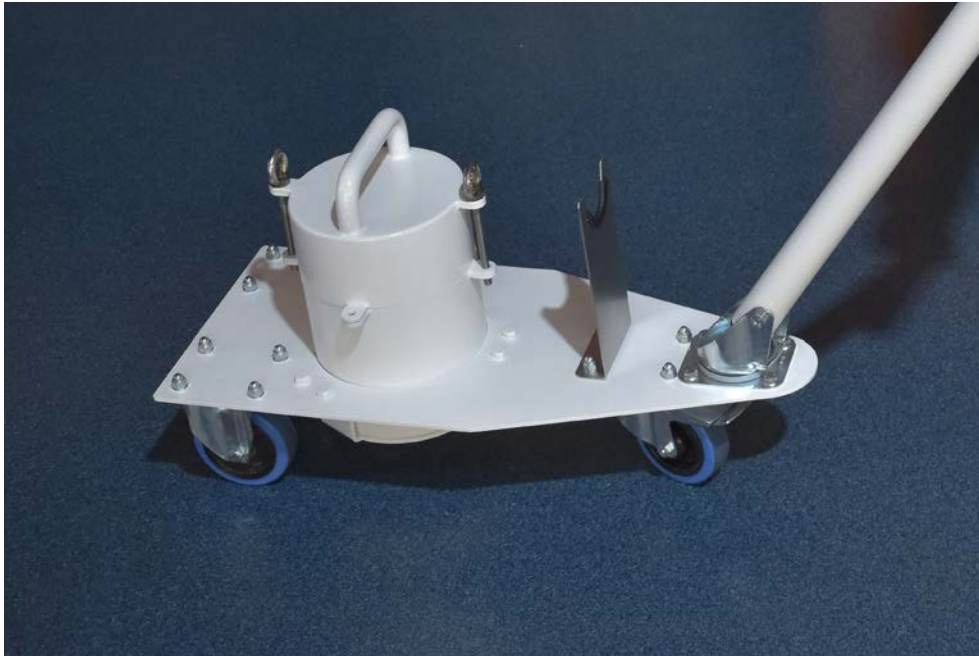
Specifications

Finishing material	Coated steel / coated lead
Shielding material	Lead
Shielding thickness *	50 mm
Outside dimensions *	Mobile cart: 600 x 270 x 600 mm (w x d x h) lead pot: 210 x 285 mm (diamter x h)
Inside dimensions *	lead pot: 60 x 127 mm (diameter x h)
Weight *	60 Kg

* We can make this product according to your needs.

Features

- Optimal for PET
- Easy, secure and ergonomic transportation
- Lifting eyes integrated for lead pot
- Swiveling handlebar and front wheel for optimized flexibility



SHIELDED SHARPS CONTAINER

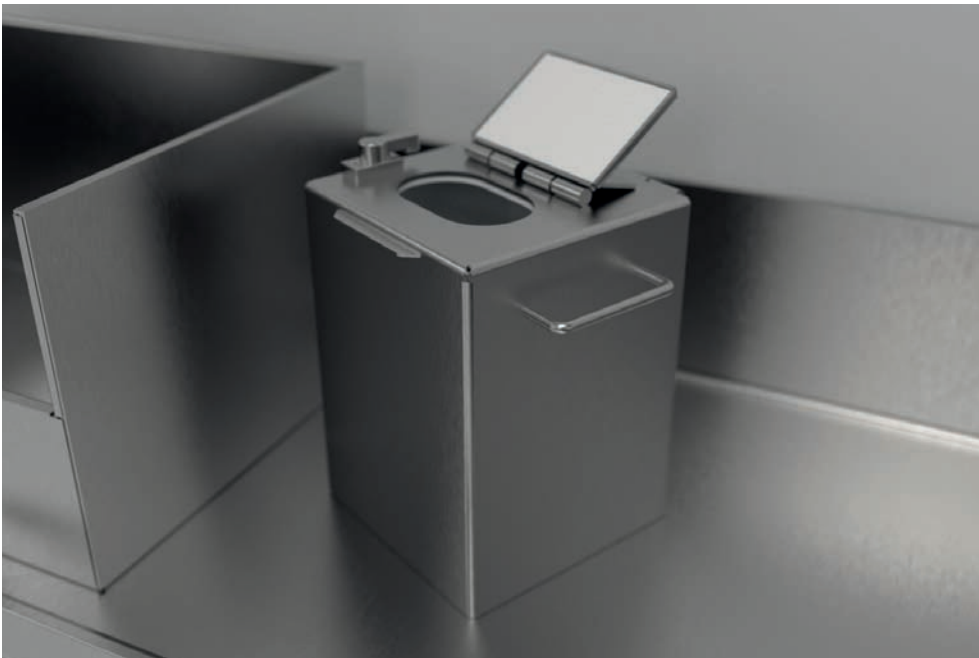
SWB113

Specifications

Finishing material	Stainless steel exterior, coated lead interior
Shielding material	Lead
Shielding thickness	3 mm
Outside dimensions	265 x 210 x 315 mm (w x d x h)
Inside dimensions	185 x 180 x 250 mm (w x d x h)
Weight	17.5 Kg

Features

- No heavy top lid that you have to lift off
- Small lid to quickly dispose of sharps



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SHIELDED WASTE BIN 18 LITER

SWB193

Specifications

Finishing material	Stainless steel exterior, coated lead interior
Shielding material	Lead
Shielding thickness	3 mm
Outside dimensions	220 x 210 x 560 mm (w x d x h)
Inside dimensions	200 x 200 x 530 mm (w x d x h)
Weight	37 Kg

Features

- Compact tabletop version
- Easy to use hinged opening
- Easy to clean stainless steel housing





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SHIELDED PEDAL WASTE BIN

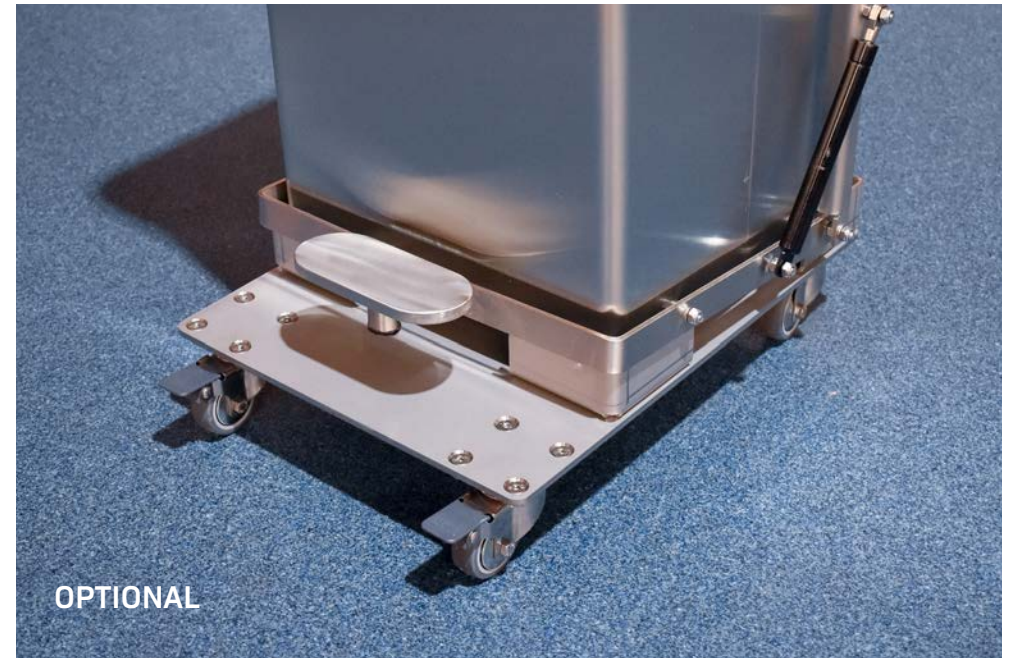
SWB153

Specifications

Finishing material	Stainless steel exterior, painted lead interior
Shielding material	Lead
Shielding thickness	3 mm
Outside dimensions	370 x 370 x 445 mm / 370 x 370 x 590 mm
Inside dimensions	27 / 45 L
Weight	28 / 35 Kg

Features

- Pedal opening
- Multiple volumes available: 27 or 45 Liters
- Clean stainless steel finishing
- Mobile platform available





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MOBILE SHIELDED CONTAINER

LS0069

Specifications

Outside material	Stainless steel
Shielding material	Lead
Shielding thickness	5 mm
Outside dimensions	800 x 800 x 1000 mm (w x d x h) excl. wheels
Inside dimensions	780 x 780 x 935 mm (w x d x h)
Weight	+/- 420 Kg

Features

- Small sliding lid for quick disposal of radioactive waste
- Convenient mobile design
- Supported large lid for disposal
- Both lids lockable with padlocks
- Strong wheeling structure



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NUCLEAR WASTE CONTAINER

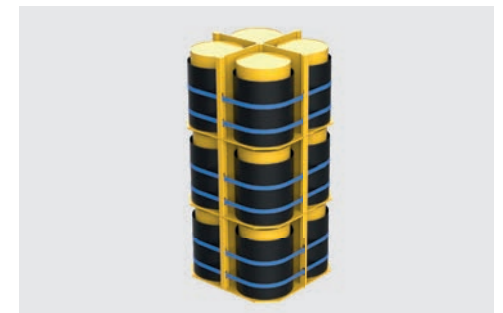
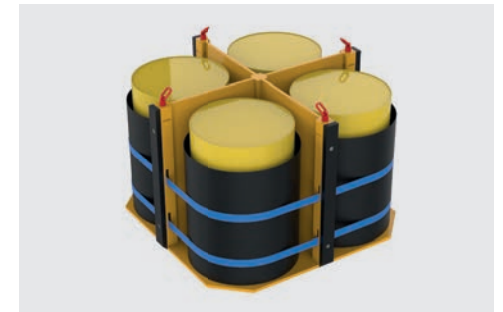
NWC1

Specifications

Finishing material	Three-layer coated steel
Shielding material	Steel (lead shielding optional)
Shielding thickness	20 mm steel inner box / optional lead shielding
Outside dimensions	1630 x 1630 x 1220 mm (w x d x h)
Inside dimensions	1430 x 1430 x 960 mm (w x d x h)
Volume	1.95 m ³
Weight	Tare weight: 4.200 Kg Max. payload: 2.800 Kg

Features

- Quick overpacking system
- LLW or ILW in drums or directly into the container
- Multi-layer leak prevention design
- Secure and easy container stacking up to three high
- IP1 or IP2 (depending on testing)
- Multiple handling methods

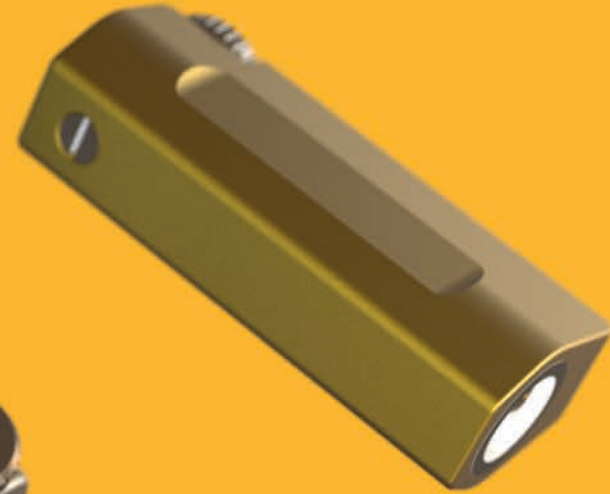


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Radiation Shielding | Disposal 25/59



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BIG-SCREW SYRINGE SHIELDS

SS2BS

Specifications

Finishing material	Anodized aluminum
Shielding material	Tungsten / lead glass (5.2 g/cm ³)
Shielding thickness	2.1 mm tungsten / 10 mm lead glass
Outside dimensions *	See below
Inside dimensions *	See below
Weight *	See below

* Depends on configuration below.

Features

- High quality anodized aluminum finishing
- Convenient big-screw to secure your syringes
- Your syringe diameter will always fit because of the big-screw
- Tungsten barrel painted white on the inside for better visibility
- Lead glass edges covered by anodized aluminum case



Versions for 1 ml

SS2BS1-1	8.8 x 72 mm
SS2BS1-2	8.8 x 76 mm
SS2BS1-3	11.5 x 76 mm

Versions for 2 ml

SS2BS2-4	11.5 x 53 mm
SS2BS2-5	11.5 x 60 mm

Versions for 3 ml

SS2BS3-6	11.5 x 65 mm
SS2BS3-7	11.5 x 69 mm

Versions for 5 ml

SS2BS5-8	15.4 x 61 mm
SS2BS5-9	15.4 x 65 mm
SS2BS5-10	15.4 x 68 mm

Versions for 10 ml

SS2BS10-11	18.2 x 75 mm
SS2BS10-12	18.2 x 85 mm

Color	Green anodized	Color	Silver anodized	Color	Gold anodized	Color	Blue anodized	Color	Red anodized
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Radiation shielding | Equipment 27/59



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CLIP-LOCK SYRINGE SHIELDS

SS2CL

Specifications

Finishing material	Anodized aluminum
Shielding material	Tungsten / lead glass (5.2 g/cm ³)
Shielding thickness	2.1 mm tungsten / 8 mm lead glass
Outside dimensions	See below
Inside dimensions	See below
Weight	See below

Features

- High quality anodized aluminum finishing
- Convenient clip-lock to secure your syringes
- Tungsten barrel painted white on the inside for better visibility
- Lead glass edges covered by anodized aluminum case

* Depends on configuration below.



Versions for 1 ml

SS2CL1-1	8.8 x 72 mm
SS2CL1-2	8.8 x 76 mm
SS2CL1-3	11.5 x 76 mm

Versions for 2 ml

SS2CL2-4	11.5 x 53 mm
SS2CL2-5	11.5 x 60 mm

Versions for 3 ml

SS2CL3-6	11.5 x 65 mm
SS2CL3-7	11.5 x 69 mm

Versions for 5 ml

SS2CL5-8	15.4 x 61 mm
SS2CL5-9	15.4 x 65 mm
SS2CL5-10	15.4 x 68 mm

Versions for 10 ml

SS2CL10-11	18.2 x 75 mm
SS2CL10-12	18.2 x 85 mm

Color	Green anodized	Color	Silver anodized	Color	Gold anodized	Color	Blue anodized	Color	Red anodized
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Radiation shielding | Equipment 29/59



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TUNGSTEN VIAL SHIELDS

VS21

Specifications

Finishing material	Anodized aluminum + tungsten
Shielding material	Tungsten
Shielding thickness	4 or 6 mm
Outside dimensions	49 x 85 or 50 x 91 mm (depends on shielding)
Inside dimensions	27 x 61 mm (diameter x height)
Weight	1.23 or 1.72 Kg (depends on shielding)
Cap type	Magnetic or sliding (see images below)

Features

- High quality anodized aluminum finishing
- Lead glass covered by anodized aluminum case
- Magnetic or sliding vial cap available
- Bottom and top parts can easily be twisted off
- Inserts available to position vials





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SHIELDED SYRINGE CARRIER

SSC113

Specifications

Finishing material	Stainless steel
Shielding material	Lead
Shielding thickness	3.2 mm
Outside dimensions	260 x 93 x 125 mm (w x d x h)
Inside dimensions	213 x 40 x 40 mm (w x d x h)
Weight	4.3 Kg

Features

- Clean stainless steel design
- Small carrying case



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Radiation shielding | Equipment 33/59



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LB LEAD CASTLE

LC201

Specifications

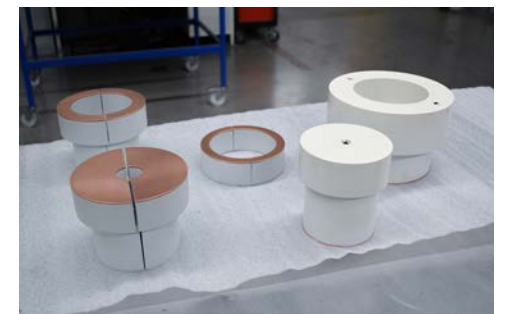
Finishing material	Coated lead
Shielding material *	Lead / low background lead / copper
Shielding thickness *	100 mm lead / 2 mm copper lining
Inside dimensions *	310 x 412 mm (diameter x height)

* We can make this product according to your needs.



Features

- Newest model lead castle for detector shielding
- Smooth sliding door
- Minimal background radiation
- Request your required shielding, materials and size!

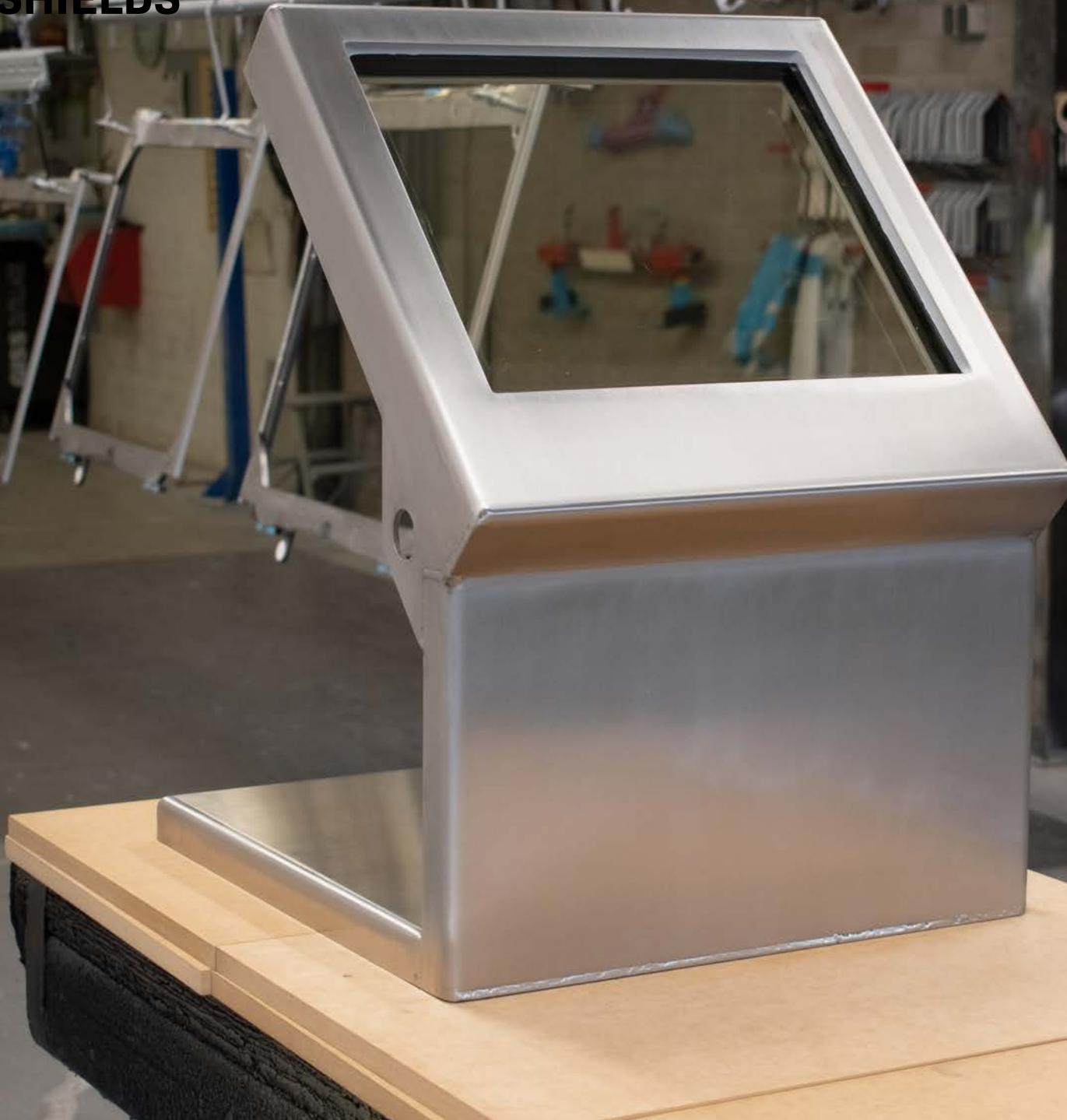


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L-BLOCK SHIELD

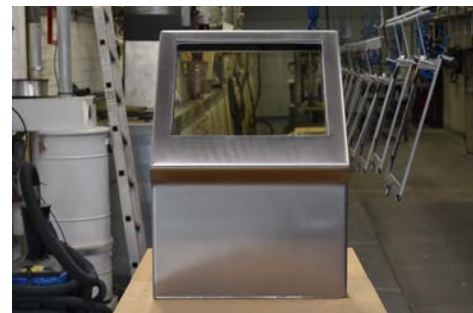
TTS11

Specifications

Finishing material	Stainless steel
Shielding material	Lead / lead glass
Shielding thickness	12.5 / 20 / 50 mm
Outside dimensions	420 x 465 x 575 mm (w x d x h)
Viewing window	340 x 290 x 55 mm (w x d x h)
Weight	140 Kg (20 mm lead)

Features

- Large lead glass viewing window
- Two lifting eyes integrated
- Clean stainless steel design
- Sharp edges have been removed to prevent scratches



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Radiation shielding | Working area 37/59



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TABLETOP WORKSTATION

SW145

Specifications

Finishing material	Stainless steel
Shielding material	Lead
Shielding thickness	5 mm
Outside dimensions	600 x 420 x 420 mm (w x d x h)
Inside dimensions	575 x 375 x 390 mm (w x d x h)
Weight	60 Kg

Features

- Retractable L-block
- Spill containment
- Clean finishing for easy decontamination



MOBILE PET WORKSTATION

SW115

Specifications

Finishing material	Stainless steel
Shielding material	Lead / lead glass
Shielding thickness *	50 mm
Outside dimensions *	1100 x 800 x 900 mm (w x d x h)
Inside dimensions *	Waste bin enclosure: 300 x 300 x 300 mm Dose calibrator well: 200 x 200 x 400 mm
Viewing window*	300 x 300 x 75 mm (w x d x h)

* We can make this product according to your needs.

Features

- Portable workstation
- Sliding lead glass viewing window
- Ideal for small PET hotlabs
- Integrated dose calibrator well and waste bin enclosure
- Left-to-right workflow concept



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QUALITY CONTROL WORKSTATION

SW125

Specifications

Finishing material	Stainless steel
Shielding material	Lead / lead glass
Shielding thickness *	50 mm
Outside dimensions *	1350 x 650 x 1420 mm (w x d x h)
Inside dimensions *	890 x 540 x 250 mm (w x d x h)
Weight	1150 Kg

* We can make this product according to your needs.

Features

- Ideal for PET quality control
- Integrated dose calibrator shielding
- Extra shielding cave optional





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CYCLOTRON L-BLOCK STATION

SW135

Specifications

Finishing material	Coated steel
Shielding material	Lead / lead glass
Shielding thickness	50 mm
Outside dimensions	1100 x 600 x 1460 mm (w x d x h)
Inside dimensions	990 x 490 x 250 mm (w x d x h)
Weight	1650 Kg

Features

- Ideal for cyclotron maintenance
- Integrated shielded safe (50 mm lead)
- Clean design for easy decontamination





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SHIELDED NUCLEAR GLOVEBOX

SGB115

Specifications

Finishing material	Stainless steel
Shielding material	Lead / lead glass ($\geq 5.05 \text{ g/cm}^3$)
Shielding thickness *	5 mm
Outside dimensions *	2060 x 750 x 2350 mm (w x d x h)
Inside dimensions *	1620 x 585 x 1550 mm (w x d x h)
Weight *	700 Kg

* We can make this product according to your needs.

Features

- Ideal for handling radioactive materials
- Transfer chamber on the right side
- Large shielded door on the left side
- Shielded waste compartment underneath the glovebox
- 6 gloveports with neoprene gloves for optimized reach
- Large lead glass viewing window

Images without gloves, real product includes gloves.



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Radiation shielding | Working area 45/59



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SHIELDED BIOSAFETY CABINET

BSC12

Specifications

Finishing material	Stainless steel / coated steel
Shielding material	Lead / lead glass
Shielding thickness	Working area: 5 / 10 mm Generator compartment: 25 / 50 / 75 mm Dose calibrator compartment: 10 / 20 / 50 mm Waste bin compartment: 10 / 20 / 30 mm
Outside dimensions	Request information
Inside dimensions	Request information

Features

- Optimal for preparation of radiopharmaceuticals
- Sliding lead glass viewing window
- Shielded dose calibrator, generator and waste bin compartments
- Integrated dose calibrator screen optional

- More information available, ask your contact person!



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Radiation shielding | Working area 47/59

MOBILE PET BARRIER

MB112

Specifications

Finishing material	Coated steel
Shielding material	Lead / lead glass
Shielding thickness	20 mm
Outside dimensions	1190 x 555 x 1655 mm (w x d x h)
Shielding dimensions	400 x 20 x 1500 mm (w x d x h)
Lead glass dimensions	340 x 220 x 55 mm (w x d x h)
Weight	220 Kg

Features

- Stainless steel tray behind shielding to store your equipment
- A standing platform can be placed for optimized ergonomics
- Large lead glass viewing window



SMALL WINDOW X-RAY BARRIER

MXBS32-22

Specifications

Finishing materials	Crash-proof PVC
Color	Yellow / green / turquoise / grey
Shielding materials	Lead / lead glass
Shielding thickness	2 mm
Shielding dimensions	80 x 2 x 190 mm (w x d x h)
Outside dimensions	80 x 68 x 192.5 mm (w x d x h)
Viewing window	30 x 10 x 24, or 40 x 10 x 30 mm (w x d x h)
Weight	70 Kg

Features

- Deep wheeling structure for secure transportation
- Handles for optimized mobility
- Four twin wheels on castors



LARGE WINDOW X-RAY BARRIER

MXBS42

Specifications

Finishing materials	Crash-proof PVC
Color	Yellow / green / turquoise / grey
Shielding materials	Lead / lead glass
Shielding thickness	2 mm
Shielding dimensions	80 x 2 x 190 mm (w x d x h)
Outside dimensions	81 x 68 x 194 mm (w x d x h)
Viewing window	80 x 10 x 60 mm (w x d x h)
Weight	70 Kg

Features

- Deep wheeling structure for secure transportation
- Handles for optimized mobility
- Four twin wheels on castors



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ADJUSTABLE X-RAY BARRIER

MXBS62

Specifications

Finishing materials	Coated steel
Color	White (yellow / green / turquoise on request)
Shielding materials	Lead acrylic
Shielding thickness	0.5 mmPb in acrylic window, 1.0 mmPb in lower panel
Outside dimensions	Up: 810 x 530 x 1900 mm (w x d x h) Down: 810 x 530 x 1200 mm (w x d x h)
Weight	60 Kg

Features

- Steel housing for improved durability and sturdiness
- Adjustable full-width lead acrylic window
- Handles for optimized mobility
- Deep wheeling structure for secure transportation
- Four twin wheels on castors





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ADHESIVE LEAD SHEET ROLLS

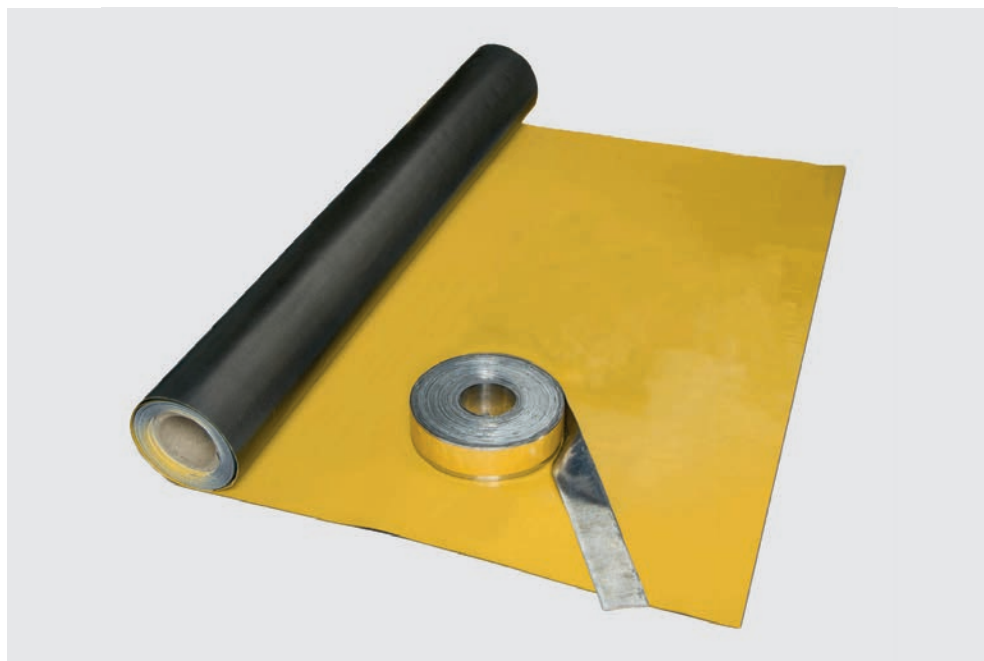
RSW11X

Specifications

Finishing material	Coated lead
Shielding material	Lead
Shielding thickness	0.5 / 1 / 1.5 / 2 mm
Dimensions	600 x 2600 / 1000 x 3000 mm

Features

- Optimized for easy application of lead lining
- Available in various lead thicknesses and sizes
- Can be made according to your drawings for adhesive shielding parts!



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Radiation shielding | Construction 53/59



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ADHESIVE LEAD PARTS

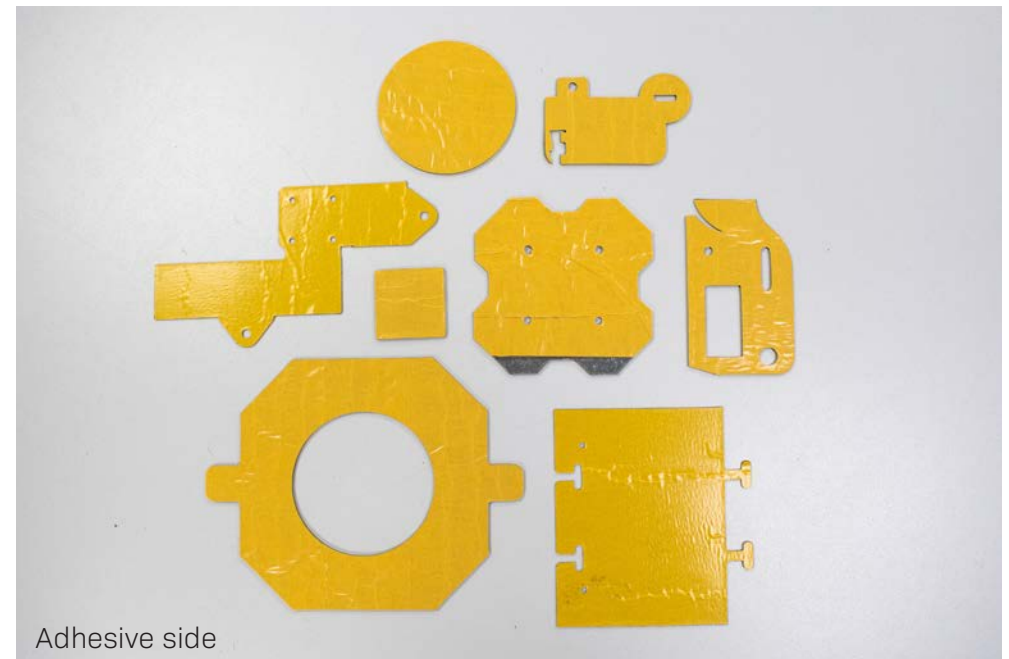
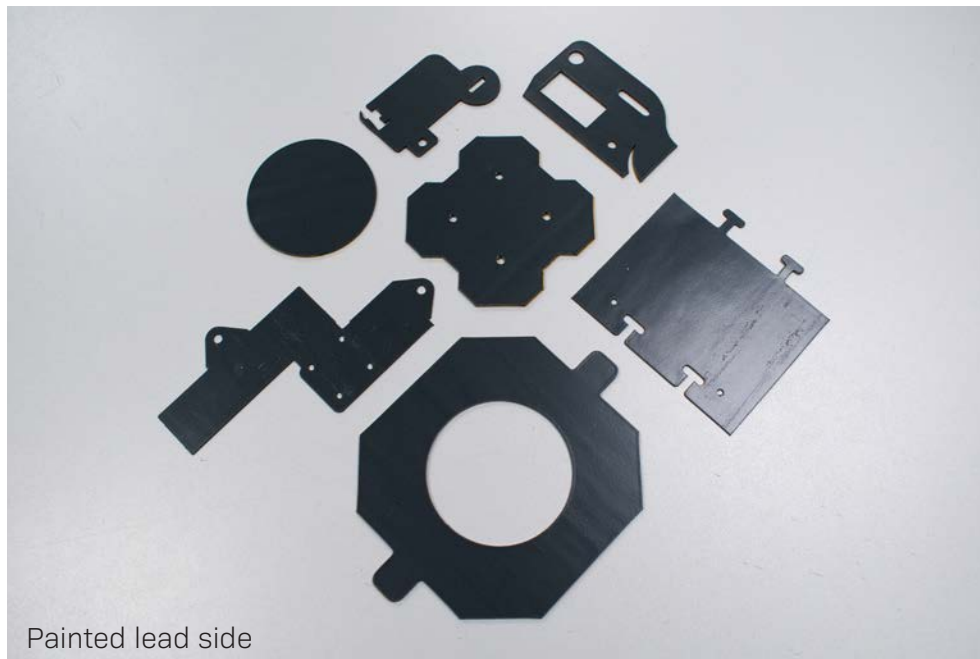
LP-ADHESIVE

Specifications

Finishing material	Coated lead RAL 7016
Shielding material	Lead
Shielding thickness	0.5 / 1 / 1.5 / 2 mm
Dimensions	Shape according to your drawings or specifications

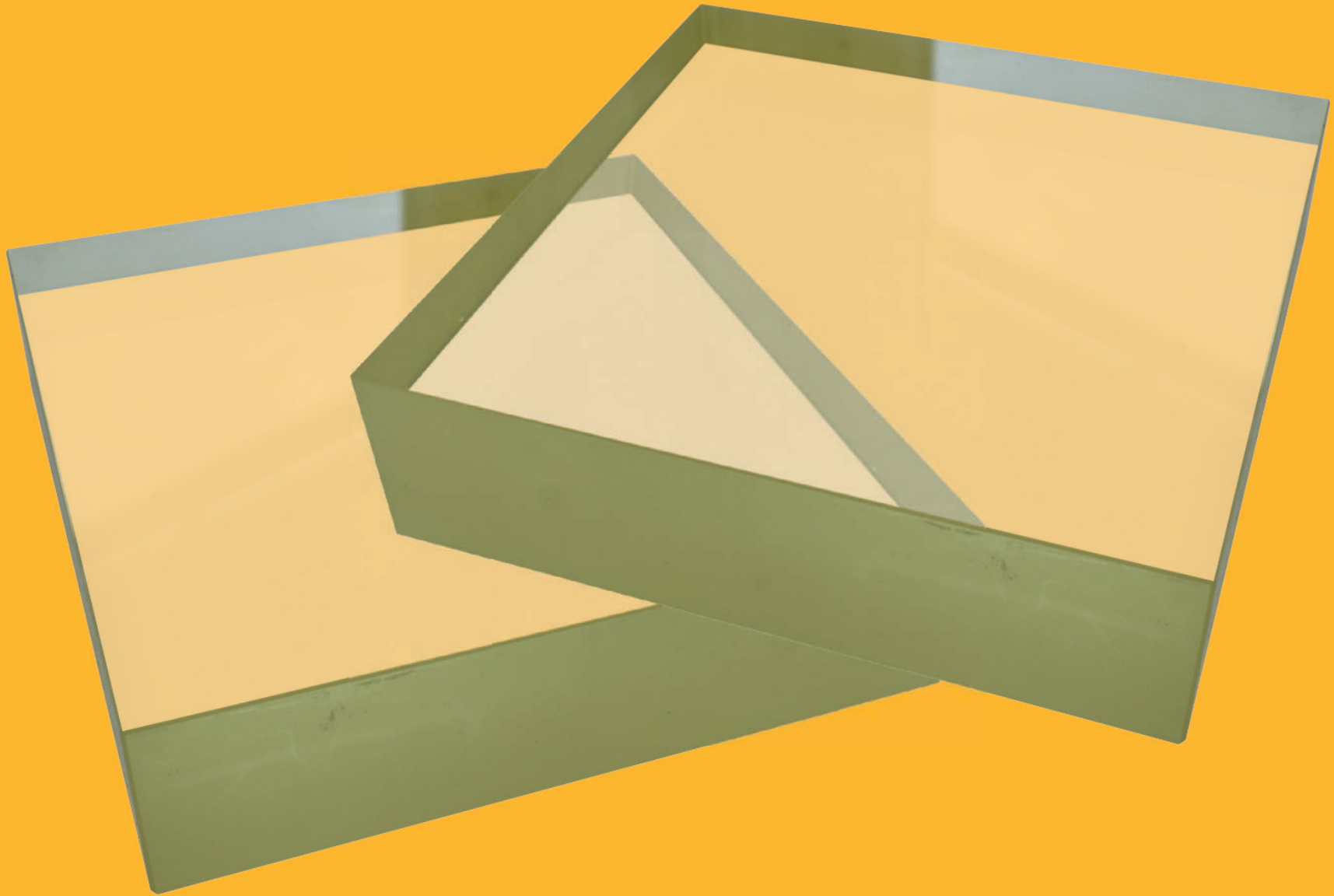
Features

- **Custom made to your shape**
- Optimized for easy application of lead lining
- Available in various lead thicknesses





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LEAD GLASS

LG100 - LG200

Specifications

Shielding material	Lead
Density *	4.7 g/cm ³ - 5.2 g/cm ³
Shielding thickness *	According to requests
Outside dimensions *	According to requests

* We can make this product according to your needs.

Features

- Can be customized to your requirements
- Holes can be added to the lead glass
- Rounded edges possible
- Can be integrated into product or inside a frame
- Square and round lead glass available

- Send us your drawings for customized lead glass parts!





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24 kg

Charge Calorifique: 28MJ
Bomb Calorimetry: 28MJ
Attenuation: 35% of Co-60
Classement au Feu M2
Fire Class M2

CMU 1000 KG

LEAD WOOL BLANKETS

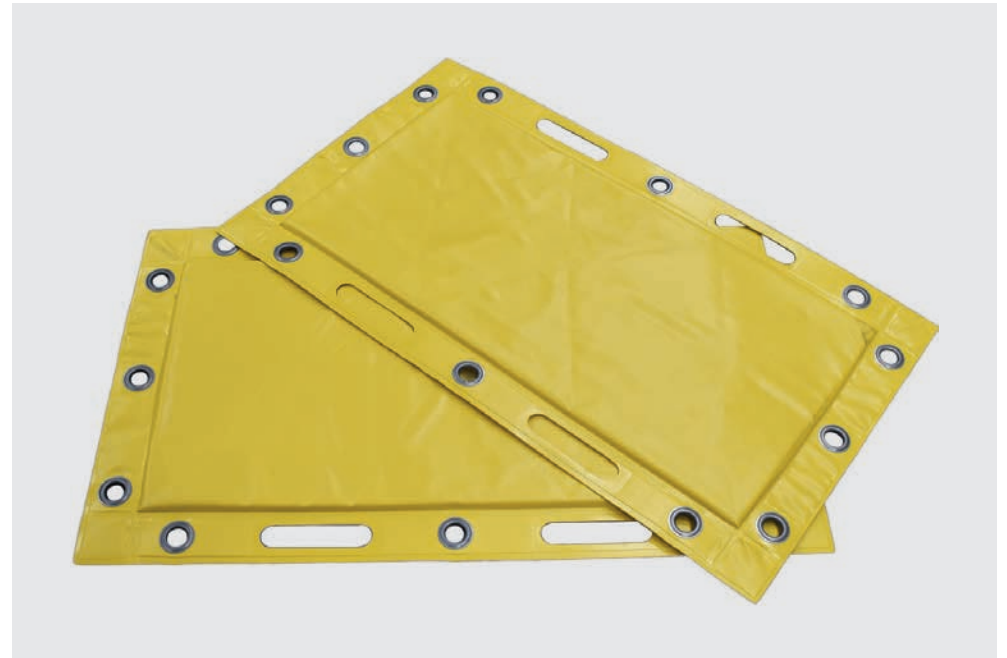
LBN11

Specifications

Finishing material	PVC laminated reinforced with nylon fibre
Shielding thickness	6 mm lead equivalence
Attenuation	35% minimum for Cobalt-60
Outside dimensions	950 x 550 mm
Shielding dimensions	800 x 400 mm
Weight	24 Kg
Grommets strength	120 Kg (12 units per blanket)
Fire class	M2

Features

- Handles for ergonomic handling
 - Highly durable shielding solution
 - Can be used for many applications
 - Storage containers and lifting beams also available
- Available in custom dimensions, custom printing and multiple colors!



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Nuclear Shields B.V.

Akkervoortweg 5
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