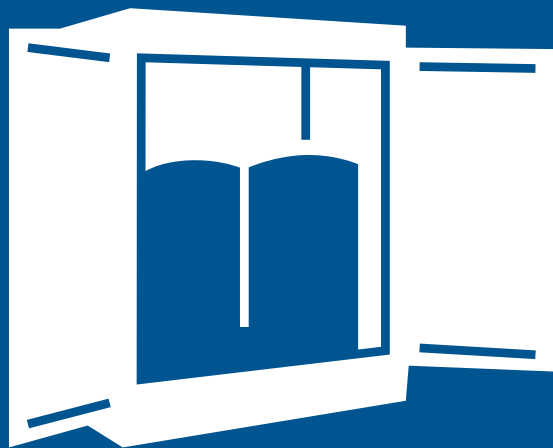




**ENVIRONMENTAL PROTECTION
& WORK SAFETY**



STEELSAFE HAZARDOUS MATERIAL DEPOTS

OPERATING INSTRUCTIONS

TRANSLATION OF THE ORIGINAL OPERATING INSTRUCTIONS

VERSION 2024-09

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IMPORTANT

Read carefully before commissioning

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1. NOTICES REGARDING THE OPERATING INSTRUCTIONS.

Thank you for your trust in DENIOS! Before you put your product into operation, ensure you read these operating instructions completely. Always observe the safety notices and warnings.

1.1 EXPLANATION OF INTERACTIVE ELEMENTS.

These operating instructions contain elements that can be clicked on to reduce the time it takes to search these instructions:

Indicator	Function (when clicked)
1. NOTICES REGARDING THE OPERATING INSTRUCTIONS.4 1.1 EXPLANATION OF INTERACTIVE ELEMENTS.4	All entries in the table of contents can be clicked on.
Return to the table of contents 	Jumps back to the table of contents.
[...] " Technical data " ↗ p. 10 [...]	Jumps to the indicated chapter.



1.2 WARNINGS.

Warnings are shown at the start of a chapter, or before sections in instructions for action where a hazard may occur. The warnings are structured as follows:

NOTICE

Warns of damage to property.

**CAUTION**

Warns of minor risk of injury.

**WARNING**

Warns of severe risk of injury.

**DANGER****The symbol indicates the type of danger**

Warns about circumstances that can result in severe injuries or death.

- Measure.





Notice for use in Ex zones:

This symbol indicates important information regarding the use of the product in explosive atmospheres.



1.3 PICTOGRAMS.

Pictograms are used to warn of hazards:

Pictogram	Meaning
	General warning
	Warning: explosive substances
	Warning: risk of crushing
	Warning: risk of hand injury



2. GENERAL SAFETY INFORMATION.

The product must only be used in accordance with the intended use.
The product may only be used by persons who have been instructed and trained.

CAUTION



Risk of injury due to unauthorised access!

Non walk-in depots! Regardless of the size of the depot, people should never be within them!

NOTICE



The depot must only be transported when empty.

- Permitted ambient temperature range: -20°C to +40°C.
- Offshore or severe use is not permitted (definition in accordance with EN 1127-2 "Mining").
- The resistance of the spill sump material to the storage medium must be demonstrated (in accordance with EN 12285-1:2018-12).
- Containers must comply with the guidelines for the transport of hazardous goods.



2.1 SAFETY INFORMATION FOR USE IN EX ZONES.

DANGER



Explosion hazard!

The roller shutter models for the SteelSafe hazardous material depots (2 D, 4 D and 4 440 D) must not be set up or used in potentially explosive atmospheres under any circumstances!

Notice for use in Ex zones:



If flammable substances are to be stored, the user must carry out a risk assessment, to set out the measures to be taken to prevent hazards in accordance with Directive 1999/92/EC.

During the handling, storage and dispensing of substances which can create an explosive atmosphere, observe the requirements of ATEX Directive 1999/92/EC. Depending on the Ex Zone, take suitable measures to prevent the ignition of an explosive atmosphere in individual cases. Sufficient ventilation must be ensured.

Note the manufacturer's declaration:

Chapter 8.1, „**Manufacturer's declaration**“  p. 26.



2.2 INTENDED USE.

The SteelSafe hazardous materials depots consist of a non-combustible sheet steel construction with integral leak spill sump and individually removable grids. They (with the exception of the 1 l plus model, for **further information see** [↗ p. 14](#)) are suited for the indoor and outdoor storage of water-polluting substances of all Water Hazard Classes 1-3 according to the German Federal Water Act (WHG) / VAUwS and the passive storage of flammable and highly flammable and extremely flammable liquids in classes H224, H225, and H226. The SteelSafe hazardous material depots should be used exclusively within the performance parameters listed in the chapter „**Technical data**“ [↗ S. 22](#). If this product is used in a water protection area the relevant state building regulations must be observed.

Claims for defects and liability

Claims for defects and liability in the event of damage or injury to persons are excluded if they are due to one or more of the following causes:

- Improper use of the equipment.
- Incorrect installation, operation or maintenance.
- Unapproved structural alterations.



2.2.1 PERMITTED AND PROHIBITED STORAGE.

The safety information in the safety data sheet for the stored substances must be observed!

Notice for use in Ex zones:



Containers must be earthed separately if they are stored on a wooden pallet or other insulating material.

Only metal or anti-static plastic canisters may be used for storage.

Storage on plastic pallets is not permitted.


Prohibited storage

The storage of gasses, powders, pressurised gas cylinders, peroxides, chemically unstable substances and explosives as well as active storage of flammable, highly flammable and extremely flammable liquids of classes H224, H225 and H226 is not permitted.



2.2.2 MISUSE.


The following in particular is considered incorrect use:

- Use of models with roller shutters in explosive atmospheres.
- Use of model 1 I plus outdoors.
- Storage of impermissible substances: The resistance of the spill sump material to the stored medium must be demonstrated (in accordance with DIN EN 12285-1:2018-12).
- Storage of impermissible containers: Containers must comply with guidelines for the transport of hazardous goods.
- Exceeding storage quantity and load capacity.
- Media which can react with one another must not be stored above the same spill sump.
- Using the depot for purposes not listed in the chapter „**Intended use**“  p. 10.



3. SCOPE OF DELIVERY.

Alongside the depot itself, the scope of delivery depends on the model ordered and its design. Your order confirmation contains all the information you need regarding additional parts. The accessories listed below can be reordered from DENIOS upon request.

For model (+ item no.)		Number	Accessory (+ item no.)	
1 FS	259 061	1	Shelf, powder coated: External dimensions W x D x H (mm): 805 x 660 x 30 Shelf load (kg): 60	259 066
	259 062	2		
2 FS	259 064	1		
	259 065	4		
2 D	291 037, 291 044	1	Steel shelving (see „ Setting up the steel shelving “  p. 17): Rack frame height (mm): 1600 Shelf dimensions W x D (mm): 1300 x 800 Shelf load (kg): 250 3 storage levels can be adjusted in 25 mm increments	
4 D	291 039, 291 046			
4 440 D	291 041, 291 048			



4. INSTALLATION.

4.1 INSTALLATION CONDITIONS.

You will receive the hazardous materials depot in a packaged condition. Before installation, remove the packaging and dispose of it according to the regional statutory regulations. Place the depot on its feet in the final installation site. Ensure that the doors of the depot can be opened and locked faultlessly.

The hazardous materials depot must only be assembled on even, level, paved surfaces. A foundation is not required. The depot, with the exception of the 1 I plus model (see below), is suitable for installation outdoors or indoors.

The recommendations of TRGS 510, 4.2 should be observed when setting up the hazardous materials depot. It must be protected from damage by vehicles using appropriate means (e.g. impact protection barriers).

The operator is responsible for ensuring lightning protection.

For the model 1 I plus:

The model 1 I plus is solely designed for indoor installation. The depot comes without a roof so that it can be set up beneath a sprinkler system and, in the event of a fire, the fire can be quickly brought under control.



4.2 (OPTIONAL) REMOVAL OF THE TRANSPORT LOCK.

CAUTION



Risk of injury from crushing!

Do not remove the transport lock until the hazardous materials depot is in its intended location!
Otherwise, there is a risk of injury due to slamming doors and damage to the depot while in transit!

The doors of the hazardous materials depot model 2 I are equipped with a transport lock, which keeps them securely locked for transport. Once the depot is in its intended location, it can be removed.

Detailed instructions for the removal of the transport lock can be found in the documentation included with delivery.



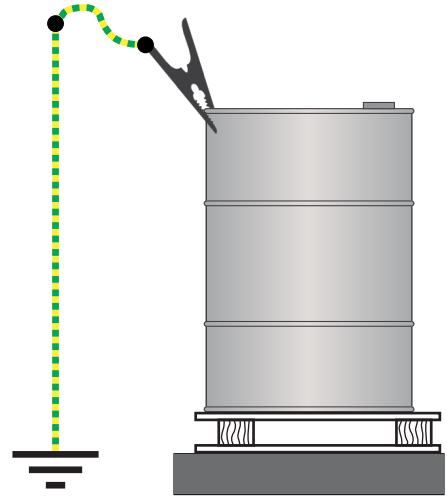
4.3 FITTING OF EQUIPOTENTIAL BONDING.

Notice for use in Ex zones:



Before commissioning, the equipotential bonding must be connected with the ground.

If storing flammable liquids or installing in potentially explosive areas then the storage system must be fitted with equipotential bonding. Bore holes with a diameter of up to 8.5 mm may be drilled into the depot's feet to achieve equipotential bonding using an earthing cable. Check that dissipation is effective.



Schematic representation: Attaching an earth terminal



4.4 (OPTIONAL) SETTING UP THE STEEL SHELVING.

Some variants of SteelSafe depots come with steel shelving which must be assembled (see Chapter 3, „**Scope of delivery**“  p. 13).

CAUTION



Risk of injury from sharp edges!

When handling steel parts with sharp edges, your hands may be cut as a result!

- Wear protective gloves during assembly.

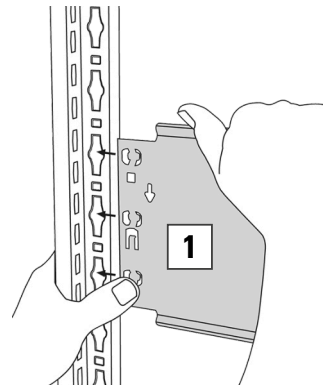
NOTICE



Brute force may damage the steel shelving during assembly!

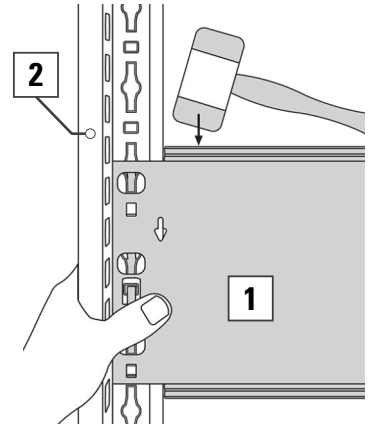
- Use a rubber mallet during assembly.

1. Position the side bar **1** as far up as possible in the slots.

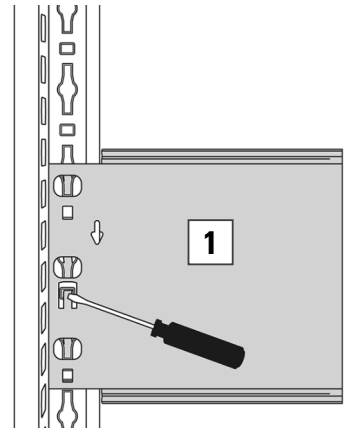




2. Press the side bar **1** flat against the T-profile **2**.
3. Tap down the side bar **1** into the T-profile **2** using a rubber mallet.

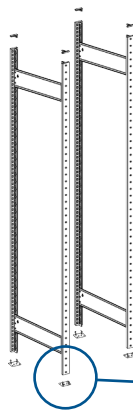


4. Press in the clips on the side bar **1** using a screwdriver or a punch.

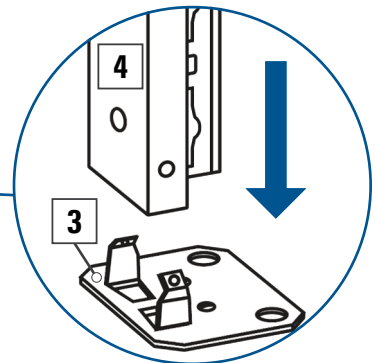


Before continuing:

Place the T-profile frame as shown.

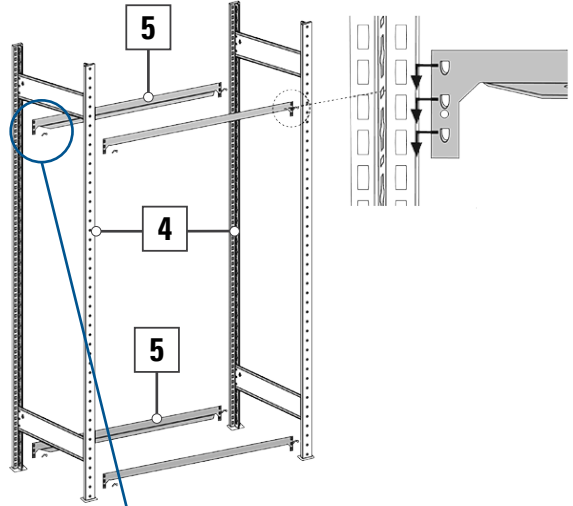


5. Connect the foot clamps **3** to the side frames **4**.

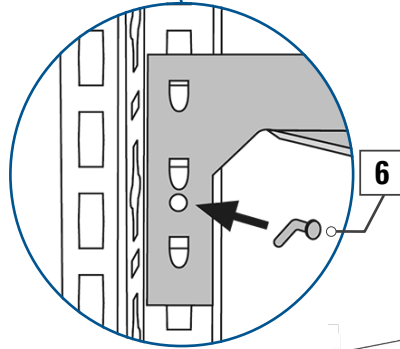




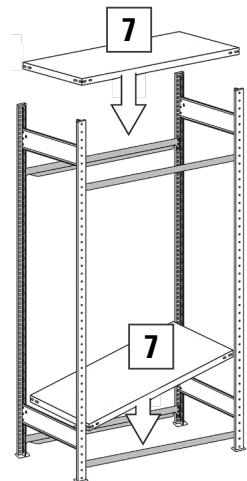
- 6. Position the side frames **4** on the left and right of the spill sump on the depot. Fit the upper and lower cross bars **5**.



- 7. Secure the cross bars with the safety pins **6**.



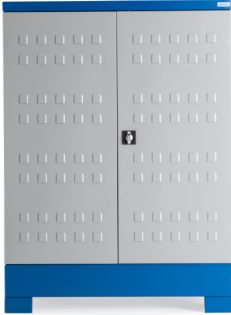
- 8. Fit the centre cross bar at the desired height.
- 9. Set the shelves **7** between the front and rear cross bars.



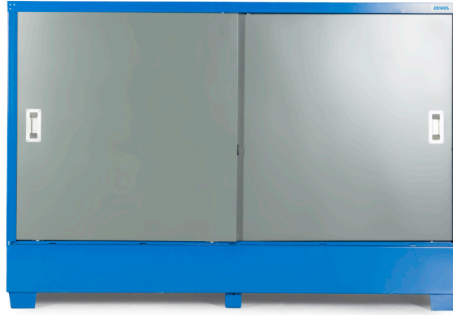


5. OPENING AND CLOSING THE DEPOT.

The three door designs:



Wing door



Sliding door



Roller shutter

(Product may vary from the illustration)

SteelSafe hazardous material depots can, depending on the model, be secured against unauthorised access in different ways. All three versions involve the use of a key which is included in the scope of delivery. Keep the key in a safe place.

CAUTION



Risk of injury from moving parts!

Moving elements on the depot may crush body parts, particularly the hands, and cause injuries as a result! Pay particular attention to the weather such as strong winds when working with the depot!



5.1 WING DOOR.

1. Insert the key into the lock and turn it.
2. Turn the handle on the door, then raise it.
3. To close the depot, carry out the above steps in reverse order.



5.2 SLIDING DOOR.

1. Insert the key into the lock and turn it.
2. Take the handle on the desired door, then move it to the side.
3. To close the depot, carry out the above steps in reverse order.



5.3 ROLLER SHUTTERS.

1. Insert the key provided into the lock and turn it.
2. Take the handles and push the roller shutters upwards.
3. To close the depot, carry out the above steps in reverse order.





6. TECHNICAL DATA.

The SteelSafe hazardous material depots are available in different sizes, designs, and with or without one or multiple shelves. When using your depot, be sure not to exceed the maximum load limits!

You can see the model name of your SteelSafe hazardous material depot on the nameplate.

6.1 MODELS 1 F S AND 2 F S.

Model	1 F S	2 F S
Item number	259 060, 259 061, 259 062	259 063, 259 064, 259 065
External dimensions W x D x H (mm)	850 x 700 x 2000	1700 x 700 x 1800
Internal dimensions W x D x H (mm)	740 x 670 x 1410	1590 x 670 x 1410
Overall load capacity (kg)	400	800
Max. shelf load (kg)	60	60
Storage capacity without shelf	Number of 200 litre drums: 1	Number of 200 litre drums: 2
Storage capacity with shelf	Small containers	Small containers
Collection volume (l)	220	220
Collection volume up to upper edge of the leak spill sump (l)	240	250



6.2 MODELS 1 I, 1 I PLUS AND 2 I.

Model	1 I	1 I plus	2 I
Item number	280 244	312 191	281 129
External dimensions W x D x H (mm)	1420 x 1635 x 2020	1400 x 2035 x 1830	2770 x 1405 x 1870
Internal dimensions W x D x H (mm)	1330 x 1600 x 1348	1330 x 1940 x 1180	2690 x 1280 x 1370
Overall load capacity (kg)	2000	2000	4000
Storage capacity without shelf	Number of 1000 litre IBCs: 1	Number of 1000 litre IBCs: 1	Number of 1000 litre IBCs: 2
Storage capacity alternative	Number of 200 litre drums: 4	Number of 200 litre drums: 4	Number of 200 litre drums: 8
Collection volume (l)	1000	1000	1000
Collection volume up to upper edge of the leak spill sump (l)	1070	1400	1085

6.3 MODELS 2 D, 4 D AND 4 440 D.

Model	2 D	4 D	4 440 D
Item number	291 036, 291 037	291 038, 291 039	291 040, 291 041
External dimensions W x D x H (mm)	1400 x 950 x 1920	1400 x 1410 x 1860	1410 x 1400 x 1970
Internal dimensions W x D x H (mm)	1330 x 870 x 1515	1330 x 1330 x 1515	1330 x 1330 x 1515
Overall load capacity (kg)	800	1600	1600
Max. shelf load (kg)	250	250	250
Storage capacity without shelf	Number of 200 litre drums: 2	Number of 200 litre drums: 4	Number of 200 litre drums: 4
Storage capacity with shelf	Small containers	Small containers	Small containers
Collection volume (l)	220	220	440
Collection volume up to upper edge of the leak spill sump (l)	263	263	502



6.4 MODELS 2 D, 4 D AND 4 440 D WITH ROLLER SHUTTERS.

Model	2 D	4 D	4 440 D
Item number	291 043, 291 044	291 045, 291 046	291 047, 291 048
External dimensions W x D x H (mm)	1400 x 950 x 1920	1400 x 1410 x 1920	1400 x 1410 x 2070
Internal dimensions W x D x H (mm)	1330 x 870 x 1505	1330 x 1330 x 1505	1330 x 1330 x 1505
Overall load capacity (kg)	800	1600	1600
Max. shelf load (kg)	250	250	250
Storage capacity without shelf	Number of 200 litre drums: 2	Number of 200 litre drums: 4	Number of 200 litre drums: 4
Storage capacity with shelf	Small containers	Small containers	Small containers
Collection volume (l)	220	220	440
Collection volume up to upper edge of the leak spill sump (l)	263	263	502

7. MAINTENANCE AND DISPOSAL.

7.1 MAINTENANCE.

Regular maintenance and care will extend the life of the depot. Empty the depot fully before cleaning. Ensure that there are no potentially explosive areas around the depot.

Maintenance step	Maintenance interval
Check the product for corrosion and contamination and clean if necessary.	Weekly
Lubricate locks and hinges with commercially-available grease if necessary.	Annually



7.2 DISPOSAL.

The SteelSafe hazardous materials depot is mainly constructed from metal parts. Dispose of any waste materials in accordance with regional statutory regulations after taking the sump out of service. The spill sump must be cleaned of all residues before disposal.



8. INSERT.

8.1 MANUFACTURER'S DECLARATION.

Manufacturer's declaration Ignition hazard assessment / non-electrical equipment

in accordance with DIN EN ISO 80079-36:2016-12,
in line with ATEX Directive 2014/34/EU

The following specified products:

SteelSafe 1 F S	259 060 / 259 061 / 259 062
SteelSafe 2 F S	259 063 / 259 064 / 259 065
SteelSafe 1 I	280 244
SteelSafe 2 I	281 129
SteelSafe 2 D	291 036 / 291 037
SteelSafe 4 D	291 038 / 291 039
SteelSafe 4 440 D	291 040

were subjected to an ignition hazard assessment in accordance with DIN EN ISO 80079-36:2016-12.

The assessment was carried out for Equipment group II gases, Category 3, explosion group IIB and temperature class T4.

The above mentioned products have no own potential sources of ignition according to the ignition hazard assessment when they are used in accordance with the intended use.

The products therefore do not fall under the scope of Directive 2014/34/EU and do not need to be correspondingly marked.

Notice: The equipment operator is obliged in accordance with § 3 (1) of the industrial safety regulations (BetrSichV), to carry out a risk assessment and then, if necessary, to produce an explosion protection document.

The products must be included in equipotential bonding measures in accordance with TRBS 2153.

The safety information in the relevant operating instructions for the above named products must be observed and complied with.

Bad Oeynhausen,
13.02.2023

p.p.

Dipl.-Ing. Bastian Bröhenhorst
- Head of Innovation CP -



8.2 DECLARATION OF COMPLIANCE.

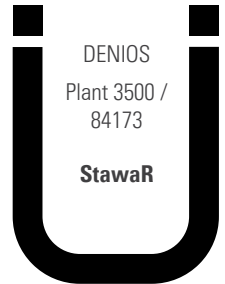
This declaration of compliance is a translation of the original!

Declaration of compliance (ÜHP)

We at DENIOS SE, hereby confirm that the product meets the requirements for steel spill sumps with up to 1000 litre volume (StawaR directive).

Models

- SteelSafe 1 F S
- SteelSafe 2 F S
- SteelSafe 1 I
- SteelSafe 1 I plus
- SteelSafe 2 I
- SteelSafe 2 D
- SteelSafe 4 D
- SteelSafe 4 440 D



Bad Oeynhausen, Germany, 2023-02-13

pp _____

Ingo Schlutter
-Head of Quality Management-