

The all-rounder with many new features

Storage area: 6 to 22 m²

The walk-in fire-rated storage container WFP from DENIOS is the ideal solution when there's not much space for storing flammable and water-polluting substances. The storage system can however be easily adapted to fit the customer's individual needs thanks to a wide range of accessories. Six sizes and a generous height ensure plenty of storage space is available. Many of our customers opt for the WFP fire-rated storage container for these reasons.

- 90 minute fire protection, both inside and outside
- Grids meet the guidelines for quality and tests RAL GZ 63 (German quality assurance standard for grids)
- Dye penetration test in accordance with EN ISO 3452-1 to check spill pallet sealing
- Galvanised components with two layers of paint give long lasting corrosion protection
- Good thermal insulation: U value 0.36 W/(m²K)
- Load capacity of the grid: 1000 kg/m²
- Designed for a typical ground snow load of $s_k = 2.5 \text{ KN/m}^2$
- Designed for a typical wind load with a dynamic pressure of $q_w = 0.585 \text{ KN/m}^2$
- EI2 90-C doors in accordance with EN 13501-2, tested to EN 1634-1
- Precise roof drainage

Overview of the system



WFP-M 6 approx. 6.6 m² storage surface



WFP-M 14 approx. 14.1 m² storage surface



WFP-X 6 approx. 6.6 m² storage surface



WFP-X 10 approx. 10.3 m² storage surface



WFP-X 14 approx. 14.1 m² storage surface



WFP-X 22 approx. 21.6 m² storage surface

Designs

The walk-in fire-rated storage container WFP range offers 2 different types of container:

- WFP-M – internal height 2280 mm
- WFP-X – internal height 2500 mm

Door dimensions

With a 1 or 2-wing door, either on the short or long side of the room system:

- 1-wing door: 1165 x 1950 (W x H mm) BRM 1250 x 2000
- 2-wing door: 1915 x 1950 (W x H mm) BRM 2000 x 2000

Door position

- The standard door position is central
- If required by the customer, doors may be positioned (for the 14/22 models) in two alternative positions on the long side. Just get in touch

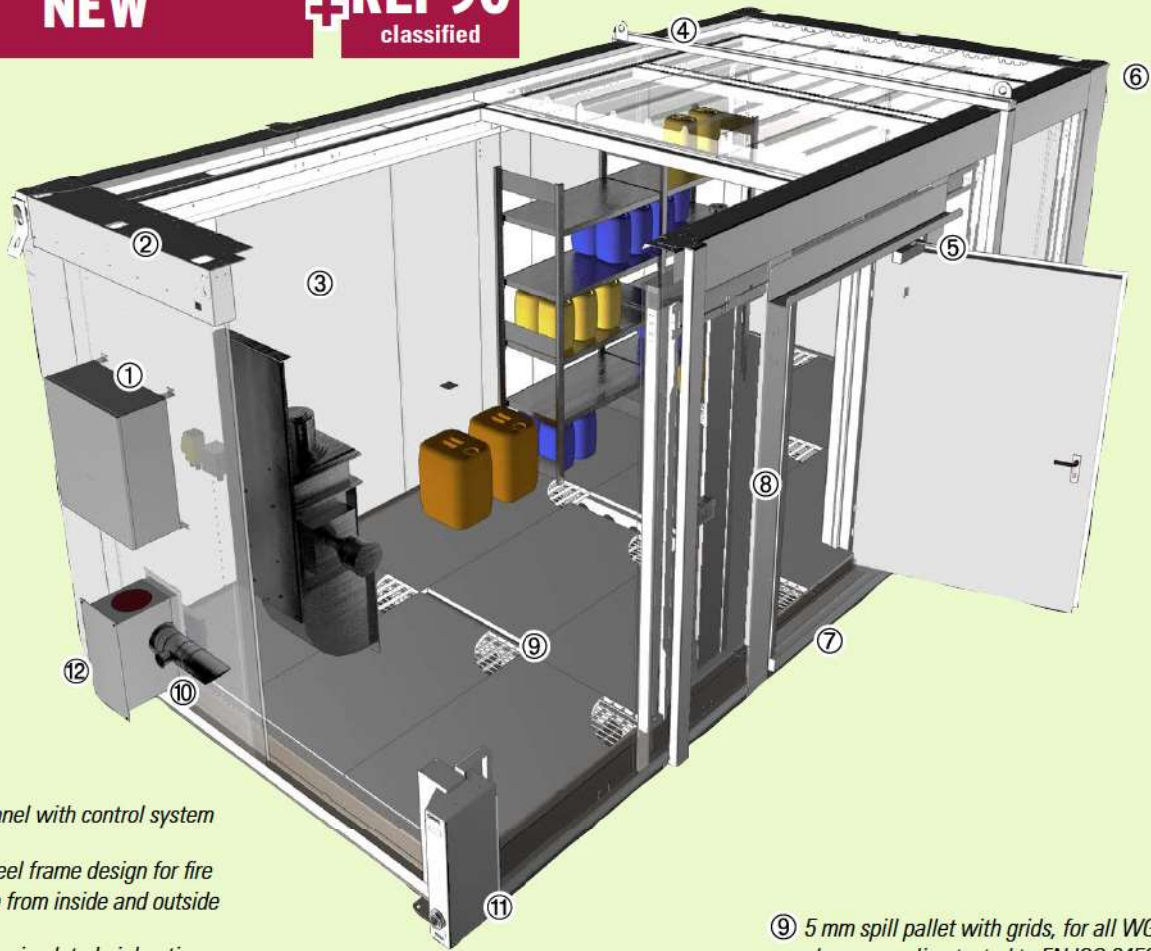


Door sequence controller, standard: for 2-wing doors, the door sequence controller ensures reliable closure of the doors. We use EI2 90-C class doors.



NEW

+REI 90
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① Control panel with control system

② Double steel frame design for fire protection from inside and outside

③ Optional recirculated air heating (ex-proof) to guarantee the whole fire-rated storage container is frost-free

④ Fire-protection panel cladding with high insulation properties

⑤ Magnetic door retention system (released automatically in the event of fire), optional

⑥ Fire-protected ventilation opening

⑦ Low sill, 147 mm high

⑧ Light switch and door closing button

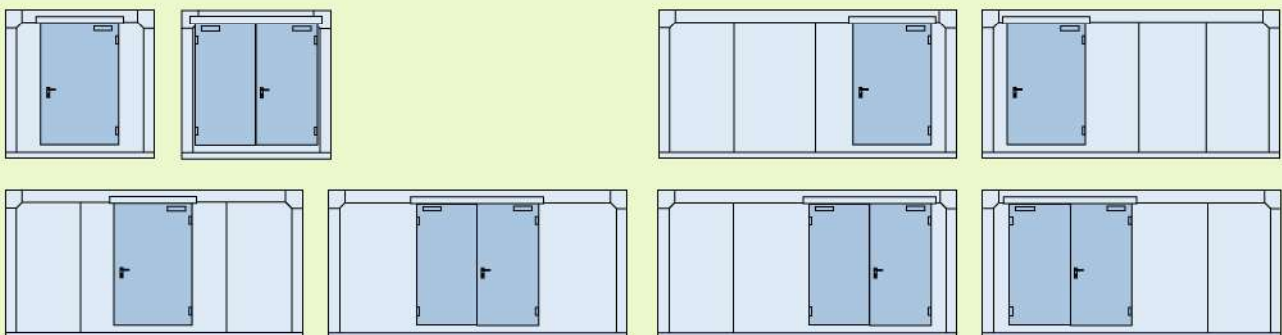
⑨ 5 mm spill pallet with grids, for all WGK classes, sealing tested to EN ISO 3452-1

⑩ Technical ventilation for the storage and handling of flammable media

⑪ Roof drainage at the front sides

⑫ Air monitoring system for extracted air

Door variants



Other fire rated Storage Containers are also available. Details can be found at

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§
Suggestions and tips for handling hazardous substances based on country-specific and European legislation.

Storing hazardous materials together in compliance with TRGS 510

Storage classes and areas

Hazardous materials are classified according to their hazard features in different storage classes (LGK). The relevant classification can be found in the product safety datasheet. Combined storage of various storage classes in the same storage area is regulated by TRGS 510, Section 7, see the following table. Deviations from the combined storage rules shown are permitted if not more than 400 kg is stored and a maximum of 200 kg per storage class or hazardous substances up to 200 kg are stored in a single store for storage classes 6.1 C/D, 8 A/B and 10 to 13 and no increased risk is perceived. Separate storage is then ensured, if there is sufficient separating distance or barriers (e.g. cabinets, walls...) or by storage in partitioned containment rooms.

Storage classes	LGK	10-13	13	12	11	10	8B	8A	7	6.2	6.1D	6.1C	6.1B	6.1A	5.2	5.1C	5.1B	5.1A	4.3	4.2	4.1B	4.1A	3	2B	2A	1	
Explosive substances	1																										1
Gases	2A	2			2			2								1									2	3	
Aerosols	2B															1											
Flammable liquids	3	5			5						6						4										
Other explosive substances	4.1A	1	1	1	1	1	1	1							1							1	1				
Flammable solids or desensitised solids	4.1B										6			4	1		4			6	6						
Self-igniting substances	4.2	6			6	6	6	6			6	6								6							
Substances which liberate flammable gas on contact with water	4.3	6		6	6	6	6	6			6	6															
Highly oxidising substances	5.1A																										
Oxidising substances	5.1B	7			7	7		7			6	6	4	4		1											
Ammonium nitrate and substances containing ammonium nitrate	5.1C	1	1	1	1	1	1	1								1											
Organic peroxides and self-reactive substances	5.2	1			1	1																					
Combustible acutely toxic substances	6.1A	5			5																						
Non-combustible acutely toxic substances	6.1B	5			5																						
Combustible toxic or chronically effective substances	6.1C																										
Non-combustible toxic or chronically-effective substances	6.1D																										
Infectious substances	6.2																										
Radioactive substances	7								1																		
Combustible corrosive substances	8A																										
Non-combustible corrosive substances	8B																										
Combustible liquids other than LGK 3	10																										
Combustible solids	11																										
Non-combustible liquids	12																										
Non-combustible solids	13																										
Other combustible and non-combustible substances	10-13																										

Notes to the table (extracts from TRGS 510, issue January 2013)

- The specific legal storage regulations must be observed: LGK 5.1 C: GefStoffV Appendix III Nr. 6 ammonium nitrate and TRGS 511 LGK 5.2: organic peroxides; Notice: The regulations specified here for combined storage may also be usefully applied to self-reactive substances.
- Combined storage is then only permitted if a maximum of 50 filled pressurised gas cylinders are stored, of which not more than 25 pressurised gas cylinders have flammable, oxidising or highly toxic, labelled H331 or toxic gases. There must be a min. 2 m high partition wall in a non-combustible substance and there must be a gap of at least 5 m between the wall and the combustible substances.
- Filled pressurised gas cylinders which all contain different gases may be stored in the same storage room in certain combinations and under certain quantity limits. Details of this can be taken from TRGS 510 or talk to your DENIOS advisor.
- Combined storage is permitted if 1.) for storage classes LGK 3, 5.1B, 6.1A and 6.1B the restrictions given in Table 3 (see TRGS 510), 2.) for storage class LGK 6.1A the restrictions given in table 4 (see TRGS 510) are complied with.
- Materials which, due to their characteristics or the amount stored, are likely to contribute to or rapidly spread fire e.g. paper, textiles, wood, shavings, hay, straw, cardboard, combustible packaging fillers, may not be stored in the same section of the store unless they form a unit with the mobile containers when being stored and transported.
- Various substances may only be stored together or with other materials if this does not pose a significant increased risk. A significant increased risk can be avoided with segregated storage.
- Oxidising substances may be stored with combustible goods 1.) in storage quantities up to and including 1 t without limitation 2.) in storage quantities over 1 t with restrictions, see TRGS 510.



Suggestions and tips for handling hazardous substances based on country-specific and European legislation.

DENIOS Risk & Hazard Prevention Guidelines, in line with HSG71

1. Identify Hazards

You must identify past, present and potential future hazards. Looking at past hazards that have since been resolved or minimised allows you to assess what methods you can adopt for the future.

The most common and dangerous hazards typically are flammables, fumes and chemicals.

2. Identify Potential Causes of Accidents

In order to plan for the management and reduction of hazards in the work environment it is important to identify what the potential causes of accidents could be.

The most common causes of accidents usually are:

- Incorrect storage of chemicals
- Inadequate placement or design of buildings and equipment
- Limited control of sources of ignition, such as electrical equipment and flammable materials

3. Assess level of risk

As an employer your business is required to assess the risks to people which may occur as a result of the existence of dangerous substances in the workplace.

Carrying out a risk assessment is essential to the reduction and minimisation of hazards.

4. Know your legal and corporate requirements

There are numerous legal requirements for you to be aware of and follow. These include:

- Control of Major Accident Hazards Regulations 1999 (COMAH)
- Control of Substances Hazardous to Health Regulations 2002 (COSHH)
- Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR), L138 (2nd Edition), (Published 2013)

As well as legal requirements you should also consider the corporate requirements that your company has set out. Often these will be an extension and enforcement of existing laws and regulations.

5. Research the products you need

It is important to consider products that are required in order for you to effectively and legally minimise hazards as an investment, rather than an isolated cost.

Products and solutions for Health & Safety aren't just a necessity but are also effective means of improving your production methods.

6. Implement the elimination or reduction of risks

Having purchased the right product or solution is often considered the easy part.

A highly technical bespoke storage container needs to be expertly installed and your staff need to know how to execute your chosen solution.

The DENIOS Way

We know how difficult it can be for you to know exactly what product you need and whether it complies with laws and regulations.

Our sales staff are fully trained and are kept up to date with the latest product innovations and changes to regulations. At DENIOS we don't just sell products, we provide solutions. We can give you free expert advice exactly when you need it.

We make sure that you get the best service before, during and after purchase.



The DENIOS hazmat manual is an essential source of knowledge for hazardous materials storage. Its 60 pages cover the principal laws, regulations and information on the storage of hazardous materials and works safety. DENIOS customers are always kept well informed.

Order your copy now!

£ 11.30

Order no.
188-294-J9



Fire-rated Storage Container WFP-M

The WFP walk-in fire-rated storage container is ideal for the storage of small containers, with an internal height of 2280 mm. Individual drums or an IBC may also be stored. The inner room may be flexibly equipped: for example with shelving or dispensing equipment. Various door systems and a comprehensive range of additional equipment enable the WFP to adapt to almost any situation.

- Storage area: 6 to 14 m² Low entry height of 147 mm



The fire-rated storage containers are supplied with a 17 mm Euro cylinder lock as standard.



Fire-rated storage container WFP-M 14 with practical shelving and 1-wing Elz 90 door, storage area approx. 14.1 m²

Door design	1-wing				
	WFP-M 6 S1	WFP-M 14 LL1	WFP-M 14 LM1	WFP-M 14 LR1	WFP-M 14 S1
Storage area [m ²]	7	14			
Body dimensions W x D x H [mm]*	3018 x 2784 x 2655	5938 x 2878 x 2789			
Internal dimensions W x D x H [mm]	2590 x 2560 x 2280	5500 x 2560 x 2280			
Door position	Short side	Long side, left	Long side, middle	Long side, right	Short side
Sump capacity [l]	930	1980			
Load capacity [kg/m ²]	1000	1000	1000	1000	1000
Order number	246-935-J9	246-927-J9	246-929-J9	246-931-J9	246-933-J9

*Transport dimensions differ from the dimensions of the body.



All cabinets are fully compliant with HSE legislation and environmental pollution prevention guidelines

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DENIOS service

- Customer Service
- Transport and logistics
- Assembly
- Acceptance and commissioning
- After Sales Service
- Maintenance

Additional accessories and safety equipment

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Important information

See page **192**



Fire-rated storage container WFP-M 6 with 2-wing EI: 90 door, storage area approx. 6.6 m²

Door design	2 wing doors				
	WFP-M 6 S2	WFP-M 14 LL2	WFP-M 14 LM2	WFP-M 14 LR2	WFP-M 14 S2
Storage area [m ²]	7	14			
Body dimensions W x D x H [mm]*	3018 x 2784 x 2655	5938 x 2878 x 2789			
Internal dimensions W x D x H [mm]	2590 x 2560 x 2280	5500 x 2560 x 2280			
Door position	Short side	Long side, left	Long side, middle	Long side, right	Short side
Sump capacity [l]	930	1980			
Load capacity [kg/m ²]	1000	1000	1000	1000	1000
Order number	246-936-J9	246-928-J9	246-930-J9	246-932-J9	246-934-J9

*Transport dimensions differ from the dimensions of the body.



Fire-rated Storage Container WFP-X

The largest version of the WFP fire-rated Storage Container offers enough room for storing small containers. The room dimensions and internal height of 2500 mm are generous, giving enough space for a well-equipped hazardous substance workstation or mixing station. Thanks to REI 90 approval, each WFP is a separate fire compartment and therefore suitable for many applications – both indoors and outdoors.

- Storage area: 6 to 22 m²
- Low entry height of 147 mm



i The fire-rated Storage Containers are supplied with a 17 mm Euro cylinder lock as standard.

WFP-X 22 approx. 21.6 m² storage surface

Door design	1-wing			
Model	WFP-X 6	WFP-X 10	WFP-X 14	WFP-X 22
Storage area [m ²]	7	10	14	22
Body dimensions W x D x H [mm]*	3018 x 2784 x 2875	4478 x 2784 x 2921	5938 x 2878 x 3009	8858 x 2878 x 3009
Internal dimensions W x D x H [mm]	2580 x 2560 x 2500	4040 x 2560 x 2500	5500 x 2560 x 2500	8420 x 2560 x 2500
Sump capacity [l]	930	1450	1980	3000
Load capacity [kg/m ²]	1000	1000	1000	1000
Order number Door position: Short side	246-957-J9	246-939-J9	246-947-J9	246-955-J9
Order number Door position: Long side, middle	–	246-937-J9	246-943-J9	246-951-J9
Order number Door position: Long side, left	–	–	246-941-J9	246-949-J9
Order number Door position: Long side, right	–	–	246-945-J9	246-953-J9

*Transport dimensions differ from the dimensions of the body.



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Additional accessories and safety equipment

See page **248**



Important information

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Walk-in fire-rated storage container WFP-X 14 with 14.1 m² floor area

Door design	2 wing doors			
Model	WFP-X 6	WFP-X 10	WFP-X 14	WFP-X 22
Storage area [m ²]	7	10	14	22
Body dimensions W x D x H [mm]*	3018 x 2784 x 2875	4478 x 2784 x 2921	5938 x 2878 x 3009	8858 x 2878 x 3009
Internal dimensions W x D x H [mm]	2580 x 2560 x 2500	4040 x 2560 x 2500	5500 x 2560 x 2500	8420 x 2560 x 2500
Sump capacity [l]	930	1450	1980	3000
Load capacity [kg/m ²]	1000	1000	1000	1000
Order number Door position: Short side	246-958-J9	246-940-J9	246-948-J9	246-956-J9
Order number Door position: Long side, middle	—	246-938-J9	246-944-J9	246-952-J9
Order number Door position: Long side, left	—	—	246-942-J9	246-950-J9
Order number Door position: Long side, right	—	—	246-946-J9	246-954-J9

*Transport dimensions differ from the dimensions of the body.



Model BMC-S

Important information

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192Fire-rated Storage Container BMC-S 180-10,
the compact store for 1 IBC

- For the storage of substances in all water-polluting classes and flammable liquids
- 90 minute fire resistance (REI90) for internal and external fires

- Flexible installation indoors or outdoors on customer-provided concrete pad without the need for safety distances
- Integral steel spill pallet with removable hot dip galvanised grids
- Sealing tested in accordance with EN ISO 3452-1 with factory test certificate
- An equipotential bonding connection point is provided as standard for avoiding static charges
- Delivered ready assembled, ready for the customer to secure to the ground
- Includes crane eyes for easy unloading
- Points to consider for the storage of flammable substances: equipotential bonding / earthing - technical ventilation
- Lockable, self closing T90 door (DIN right) on the short side of the container with anti-panic lock

ACCESSORIES



- Explosion proof lighting, optional

Order no. 129-521-J9



- Exhaust air monitoring for hazmat Storage Containers from 25 m³

Order no. 205-003-J9



- Control system (optional)



- Self-closing door (available as an option)

Order no. 174-314-J9

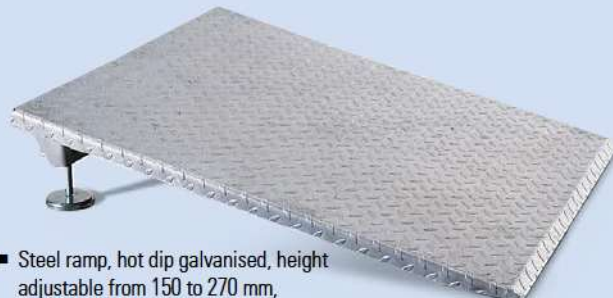


- Technical ventilation with fire protection cut-off device

Order no. 196-374-J9



- Steel ramp, hot dip galvanised, height adjustable from 150 to 270 mm, dimensions W x D (mm): 1035 x 900, Order no. 126-133-J9





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Fire-rated Storage Container BMC-S 180-4, for storing up to 4 x 205 litre drums



Fire-rated Storage Container BMC-S 180-4 with E190 door, for up to 4 x 205 litre drums (shelving optional)



Fire-rated Storage Container BMC-S 180-2 with E190 door, for 2 x 205 litre drums and shelving for small containers (optional)



Fire-rated hazardous material cabinets for installation in buildings

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Model	BMC-S 180-2	BMC-S 180-4	BMC-S 180-10
Storage capacity IBC / CP / EP / drum	0 / 0 / 1 / 2	0 / 1 / 1 / 4	1 / 1 / 1 / 4
External dimensions W x D x H [mm]	1848 x 1300 x 2463	1848 x 1775 x 2463	1848 x 1775 x 2463
Internal dimensions W x D x H [mm]	1542 x 1012 x 2100	1542 x 1487 x 2100	1345 x 1350 x 1500
Containment volume 1 [l]	380	570	2000
Load capacity [kg/m ²]	1000	1000	1250
Weight [kg]	1330	1500	1730
Order number	157-874-J9	155-754-J9	157-879-J9
ACCESSORIES	Grid shelf		
Order number	158-238-J9	158-239-J9	-

i Selected models are available from stock, others can be delivered within approx. 6 weeks.

i Flexible for various applications! Fire-rated Storage Containers are suitable for indoor and outdoor use. They can be used to create a separate fire rated storage room within the production area, or as an outdoor fire protection store, for example.

Recommended equipment and accessories for your Storage Container

DENIOS hazmat storage containers have a wide range of fittings and equipment. This meets the legal requirements and offers exceptional functionality. You can also choose from many practical equipment packs and specific accessories – the best container for your needs.



■ Shelving

Individually adjustable small container shelving creates extra storage space. Make the best use of the storage room in your hazmat or fire-rated storage container.



■ Access system

as an alternative to the mechanical closure system, DENIOS access systems use a fingerprint or a transponder. This keeps your substances safe from unauthorised access.



■ System monitoring / gas warning detectors

DENIOS offers numerous monitoring and warning systems for monitoring temperature, air extraction and air humidity as well as protection against gases which pose a risk to health.



■ Grids

Hazmat storage containers are equipped as standard with galvanised grids (mesh width 40/30 mm or 60/30 mm). For improved access using lifting equipment, e.g. pallet truck, narrow meshed grids are available (mesh width 22/11 mm or 33/11).



■ Conveyors

DENIOS storage containers can be fitted with conveyors in order to optimise working processes.



■ Sockets

For the safe connection of works equipment, available as 230 V or 400 V, 50 Hz. Image shows sockets in Ex proof design. We also have non Ex sockets available.



■ Climate control equipment

To achieve a precise temperature, DENIOS offers modular solutions with corresponding cooling and climate control technology. The image here shows an internal unit.



■ Fire extinguishing technology

Installing extinguishing equipment in a store housing flammable substances contributes directly to the protection of people and the environment. DENIOS offers sprinkler systems, semi-fixed low expansion foam extinguishing systems, aerosol extinguishers, powder or CO2 extinguishers for example.

A wide range of additional equipment can be fitted to suit your individual needs. From safety products such as emergency showers to integrated ventilated workstations and shelving, heating, and climate control equipment or paint stirrers etc. We will work with you to select the right equipment - we'd be happy to advise you.



**Is your requirement more complex?
We would be pleased to provide you with advice!**

... free Hotline **01952 700 572**

