



Chemical Storage Cabinets

Chemical Storage Buildings

Customized Enclosures - Temperature
Controlled and Fire Rated Designs

Chemical Storage Lockers

Steel Spill Decking Systems

Automatic Doorway Spill Barriers

Large Capacity Containment
Berms - The HazBerm



Chemical Storage and
Hazardous Process
Containment Technology



Development, Design, Production

For over 20 years DENIOS has been the worldwide leader in the design and manufacture of custom engineered chemical storage structures. Working directly with our customers we help assess risks and provide solutions for the safe storage and containment of hazardous chemicals and processes.

DENIOS ENGINEERING provides you

A complete understanding of hazardous chemicals and chemical processes. Our Technical Sales and Engineering Staff know specific chemicals and the risks they pose to facilities, personnel, and the environment. They will work with you every step of the way in designing a safe storage solution for your individual applications.

Expertise in helping you meet applicable laws and regulations. DENIOS not only knows the regulations, we work directly with leading insurers, risk managers, and government authorities in developing new equipment or setting performance standards for existing designs and construction. We will work with you in meeting Federal standards as well as those of your local authorities, helping make sure your DENIOS products are in complete compliance.

A partner in safety and environmental protection. When we put a DENIOS label on your product it's to let you know we stand behind what we design and manufacture, and that we're here for you well after the sale is completed.

Table of Contents

Chemical Storage Cabinets

- 4 Chemical Storage Cabinets
- 6 FM Approved Cabinets
- 8 IBC Storage Cabinets
- 9 Standard Options

Chemical Storage Buildings

- 10 Chemical Storage Buildings
- 13 Housing Hazardous Processes

Customized Enclosures– Temperature Controlled and Fire Rated Designs

- 14 Custom Enclosures
- 15 Temperature Control Enclosures
- 18 2 and 4-Hour Fire Rated Designs

Chemical Storage Lockers

- 20 Chemical Storage Lockers
- 21 K-Series and PK-Series Lockers
- 22 N-Series and Specialty Lockers
- 23 IBC and Heated Lockers

Custom Storage Options

- 24 Cabinet, Building and Locker Options

Steel Spill Decking Systems

- 26 Spill Decking

Automatic Doorway Spill Barriers

- 28 Automatic Doorway Spill Barriers

Large Capacity Containment Berms– The HazBerm

- 30 HazBerm System



Chemical Storage Cabinets

DENIOS is the pioneer in the development of Drum and IBC Storage Cabinets as a safer and more efficient alternative to buildings for chemical storage. The non-occupancy design of Cabinets, features full-face opening door styles, allows all materials to be moved via forklift, and relieves personnel from having to enter a potentially hazardous environment to maneuver containers by hand.

Product characteristics:

- Rigid steel frame structure, robust and reliable for daily industrial operations
- Suitable for flammable/inflammable liquids. A heat-insulated version is available for the frost-free storage of goods
- A wide range of standard sizes and configurations allow for numerous storage capacities
- Optional hinged, roll-up or sliding doors are available

DENIOS Cabinets – General Information

DENIOS Drum & IBC Storage Containers are all designed with a welded steel frame structure. The wall and roof are covered with metal sheets which are painted to ensure optimal corrosion protection. The spill sump, firmly welded to the frame, provides protection from potentially costly spills and hazards to personnel and the environment.



Two tiered storage cabinet with hinged doors holds 16 drums.



Two tiered storage cabinet with sliding doors holds 96 drums.

Choose from numerous standard design styles

Store hazardous substances in compliance with environmental requirements.

DENIOS manufactures the widest variety of Cabinets available on the market today. Choose between single or multi-tiered designs with either one or two sided access. Cabinets are suitable for indoor or outdoor placement and provide complete physical separation of stored chemicals from the surrounding facility and/or from other incompatible chemicals or ignition sources.

Standard non-combustible construction of an 11 gauge tubular frame with 16 gauge steel walls. 2 and 4-hr fire rated construction also available

Choose between 1, 2, and 3 tier models

Cabinets are generally delivered in a single unit, ready for placement and are easily relocated as facility requirements change.

Common Applications for Cabinets:

- Segregated indoor or outdoor storage of flammable or other process chemicals
- Separation of flammable liquids from general warehousing areas
- Temperature controlled indoor or outdoor storage of raw materials
- Higher volume waste accumulation and storage areas



Storage Cabinet Product Characteristics	Equipment		DENIOS ENGINEERING Typical Options
	Standard	Additional Designs/Styles	
<ul style="list-style-type: none"> - Steel profile structure - Can be accessed by fork lift truck - Supplied fully-assembled 	<ul style="list-style-type: none"> - Spill sump made of steel - Lifting eyes* - Rigid rear stopping safeguard - Completely painted version 	<ul style="list-style-type: none"> - Double design depth - Lockable hinged, roll-up or sliding doors - Sump made of plastics / stainless steel - Horizontal drum storage - Choose between blue, tan, and white paint colors 	<ul style="list-style-type: none"> - Cooling unit / air conditioning - Heat insulation - Heating system - Special dimensions - "Frost-free" version for temperature-sensitive substances - 2 and 4-hr fire rated models

A versatile range of accessories is available to meet your requirements on further individual equipment (see page 16).

*Cabinets only to be lifted when empty.





Exclusive to DENIOS, FM Approval (Class 6049) Non-Occupancy Storage Cabinets

- Designed and Sized for 350 Gallon IBC Totes or 55 Gallon Drums
- Storage capacities from 2 to 12 Totes or 8 to 48 drums
- Choose between models with hinged or sliding doors, both allow easy access to totes/drums from outside the Cabinet
- Sump volumes meet EPA, NFPA, and FM requirements
- Low-viscous test ensures sumps are leak free
- Constructed of heavy gauge, welded steel frames and walls
- Available in one and two tiered designs with up to four storage bays



Two-tiered storage Cabinet with sliding doors (standard) for 16 55-gallon drums



The hinged doors open full face, providing easy access to the stored drums.

Excerpt from our complete program:

Total Capacity per Cabinet (IBC/sliding)	Sizes L x W x H	Number of Storage Tiers	Number of Storage Bays	Capacity per Bay (drums/IBC)	Bay Dimensions (in)			Load Capacity per Bay (lbs)	Sump Volume (gal)
					Length L	Depth D	Height H		
4	12 x 6 x 13	2	2	2	108	50	61	10,500	371
8	22 x 6 x 13	2	4	2	108	50	61	10,500	759
12	28 x 6 x 13	2	4	3	154	50	61	14,575	1,076
Drums/sliding									
16	12 x 6 x 11	2	2	8	108	50	50	7,500	230
32	22 x 6 x 11	2	4	8	108	50	50	7,500	470
48	28 x 6 x 11	2	4	12	154	50	50	9,600	660

FM Approved Single Tiered 2-hr Fire Rated Models are Designed to Accommodate Drums and/or IBCs

exclusive
DENIOS



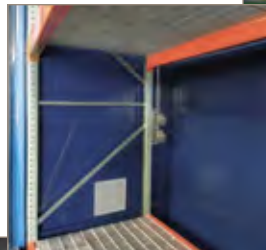
- Capacities of 2 to 6 Totes or 8 to 24 drums
- Drums/totes rest on adjustable rack system, allowing storage flexibility
- Models are equipped with roll-up fire doors for ease of access to stored chemicals and added safety in case of fire
- Single tier design features one or two storage bays
- Constructed of heavy gauge welded steel and FM approved 2-hr fire rated walls and doors
- Sump volumes meet EPA, NFPA, and FM requirements
- Low-viscous test ensures sumps are leak free
- Roll-up doors dimensions included in model box



Single tiered unit provides storage for either eight 55 gallon drums or two 350 gallon totes



Drums/totes rest on adjustable rack system, allowing storage flexibility



FM Approved Two Tiered Fire Rated Models are Designed Specifically for Drums or IBCs, Storing 16-48 Drums or 4-12 IBC Totes

- These models provide the construction features listed above but add a second tier for additional storage capacity



Roll-up fire doors allow Cabinets to remain open during work hours for easy access. A fuse link triggers the doors to close in the event of fire.

Excerpt from our complete program:

Total Capacity per Cabinet (drums/IBC)	Sizes L x W x H	Number of Storage Tiers	Number of Storage Bays	Capacity per Bay (drums/IBC)	Bay Dimensions (in)			Load Capacity per Bay (lbs)	Sump Volume (gal)
					Length L	Depth D	Height H		
8/2	13 x 8 x 10	1	1	8/2	108	50	61	10,500	353
12/3	18 x 8 x 10	1	1	12/3	154	50	61	14,575	352
16/4	24 x 8 x 10	1	2	8/2	108	50	61	10,500	364
24/6	32 x 8 x 10	1	2	12/3	154	50	61	14,575	535
Drums									
16	13 x 8 x 13	2	2	8	108	50	50	7,500	227
32	24 x 8 x 13	2	4	8	108	50	50	7,500	479
Totes									
4	13 x 8 x 14	2	2	2	108	50	61	10,500	353
8	24 x 8 x 14	2	4	2	108	50	61	10,500	744



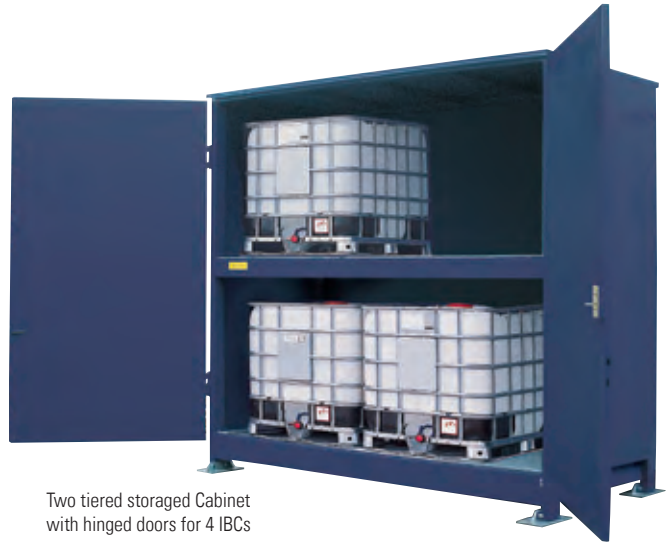
IBC Storage Cabinets

Optimal Storage of IBCs

These Cabinet designs have been modified to accommodate IBC totes. Bay lengths of 120 and 154 inches allow for storage of 2 or 3 totes per bay. Bay heights of 60, 80, and 84 inches all allow ample room for storage flexibility. IBC Cabinets can also be used for storing 55 gallon drums or drums on pallets.

Numerous sizes/configurations available:

- Up to 2 shelving levels
- Lengths of max. 27 feet as standard (6 totes)
- Varying widths for loading from one side or from both sides
- Front with hinged, roll-up or sliding doors
- Max. storage capacity for 24 IBCs per container
- Increased sump capacity exceeds mandatory Federal regulations



Two tiered storage Cabinet with hinged doors for 4 IBCs



Two-tiered storage Cabinet with sliding doors (standard) for 8 IBCs Totes saves facility space

Excerpt from our complete program:

Total Capacity per Cabinet (IBCs)	Sizes L x W x H	Number of Storage Tiers	Number of Storage Bays	350-gal Totes per Bay (lbs)	Bay Dimensions (in)			Load Capacity per Bay (lbs)	Sump Volume (gal)
					Length L	Depth D	Height H		
2	11 x 5 x 9	1	1	2	120	50	80	10,500	388
3	14 x 5 x 9	1	1	3	154	50	84	14,575	388
4	11 x 5 x 12	2	2	2	120	50	60	10,500	388
6	14 x 5 x 12	2	2	3	154	50	60	14,575	388
4	21 x 5 x 9	1	2	2	120	50	80	10,500	388
6	27 x 5 x 9	1	2	3	154	50	84	14,575	465
8	21 x 5 x 12	2	4	2	120	50	60	10,500	388
12	27 x 5 x 12	2	4	3	154	50	60	14,575	465

Storage cabinets are also available with double design depth with two sided access, increasing the storage capacity by 100%.

Standard options can provide for numerous, unique applications

DENIOS Cabinets can be designed utilizing many options, providing for the safe storage of most hazardous chemicals. Whether your needs require fire rated storage, temperature control, or the storage of acids and corrosives, DENIOS standard options provide the necessary engineered enhancements assuring safe, compliant storage of most chemicals.

Options include:

- 2 and 4-hour fire rated construction
- Hinged, sliding, and roll-up door styles
- Fire suppression systems
- Temperature controlled systems
- For more standard options, please see pages 24-25.



One-tiered storage Cabinet with sliding doors (standard) for 3 IBC Totes saves facility space. Model in picture features optional fire rated design and fire suppression system

Two-tiered cabinet out-fitted for horizontal placement of drums and with an optional vinyl curtain door

Excerpt from our complete program:

Total Capacity per Cabinet (55-gal drums)	Sizes L x W x H	Number of Storage Tiers	Number of Storage Bays	Capacity per Bay (55-gal drums)	Bay Dimensions (in)			Load Capacity per Bay (lbs)	Sump Volume (gal)
					Length L	Depth D	Height H		
16	11 x 9 x 9	1	2	8	120	50	88	7,500	297
24	14 x 9 x 9	1	2	12	154	50	88	9,600	381
32	11 x 9 x 10	2	4	8	120	50	50	7,500	297
48	14 x 9 x 10	2	4	12	154	50	50	9,600	381
72	14 x 10 x 17	3	6	12	154	50	50	9,600	431
32	21 x 9 x 9	1	4	8	120	50	88	7,500	600
48	27 x 10 x 9	1	4	12	154	50	88	9,600	767
64	21 x 9 x 10	2	8	8	120	50	50	7,500	600
96	27 x 10 x 10	2	8	12	154	50	50	9,600	767
144	27 x 10 x 15	3	12	12	154	50	50	9,600	867



Chemical Storage Buildings

DENIOS Chemical Storage Building designs provide more storage flexibility, enhancing the efficiency of the structure over competitive models. Numerous size options provide up to 25 standard sizes to choose from, providing the optimal space for storing your hazardous chemicals or processes. Designed for occupancy by personnel, DENIOS also provides numerous options to enhance safety, efficiency, and security in all our Buildings. Most DENIOS Chemical Storage Buildings carry FM Approval.

Sizes and Styles

- Available in 8, 10 and 12 foot depths with lengths from 8 to 50 feet
- All units are built to accommodate indoor or outdoor placement. Door styles include hinged doors and roll-up doors and can be designed in multiple configurations
- Non-Combustible, fire rated, and temperature controlled models available

DENIOS Buildings – General Information

DENIOS Buildings are all designed with a welded steel frame structure. The wall and roof are covered with high-quality metal sheets and are painted to ensure optimal corrosion protection. The spill containment sump, firmly welded to the frame, provides protection for the environment and groundwater.



16 x 8 Storage Building can be engineered for the storage of chemicals or housing of chemical processes



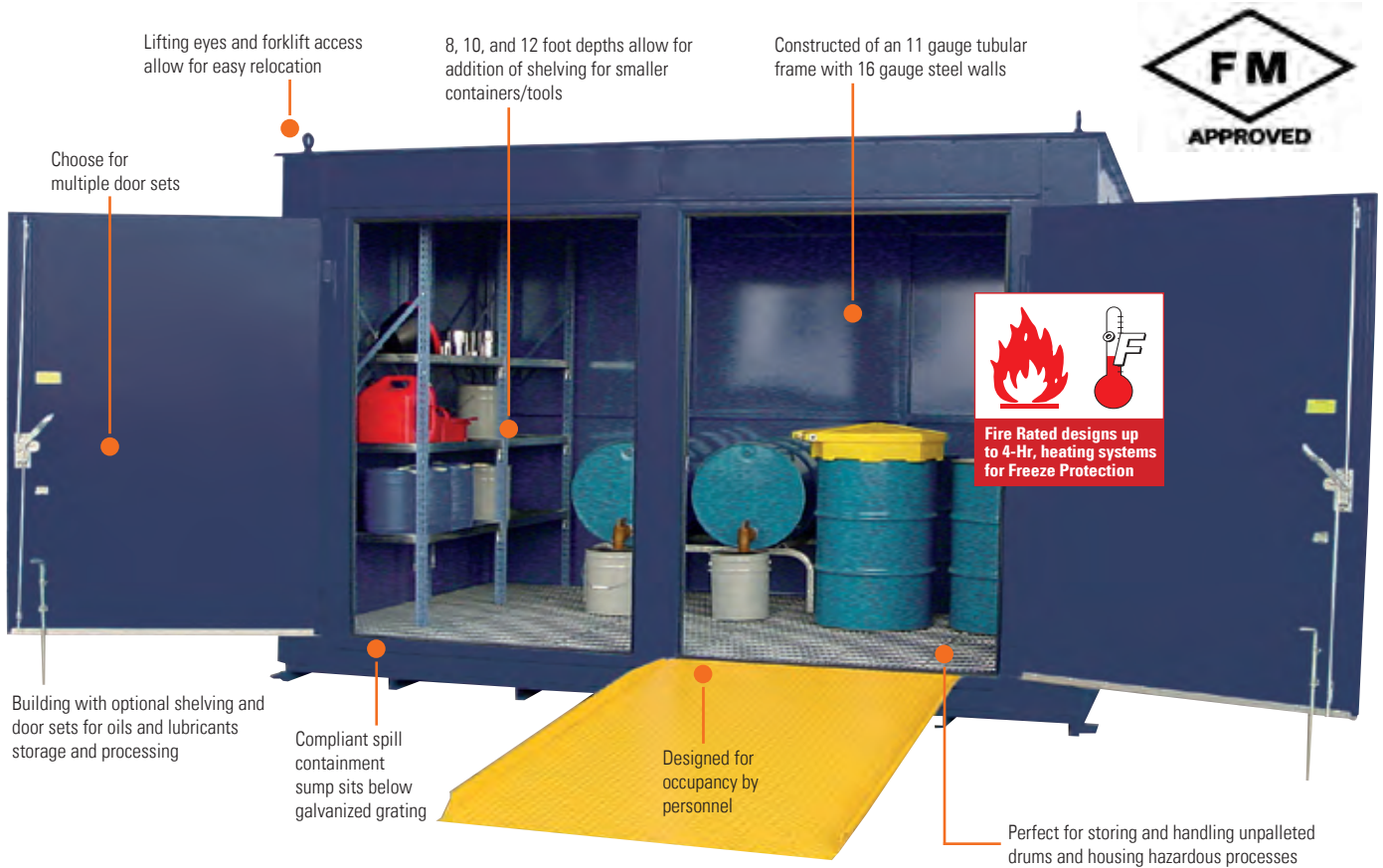
This 28 x 8 Storage Building holds up to 39 drums. Seen here with optional door sets and integrated shelving package.

Store, mix, and dispense hazardous chemicals in a separate enclosure away from facilities and personnel

DENIOS Storage Buildings are modular structures designed for housing hazardous chemicals or processes. Standard Buildings provide storage for non-combustible chemicals. A wide range of options and wall/door constructions are available, allowing for the storage of flammables and combustibles or hazardous processes such as pumping or process heating.

Applicable Regulations:

DENIOS designs its HazMat storage buildings to be compliant with all recognized National Codes and generally accepted national standards. In addition to federal and local regulations, DENIOS Buildings also meet standards established by Factory Mutual (FM Global) as well as other risk management organizations.



Storage Cabinet Product Characteristics	Equipment		DENIOS ENGINEERING Additional Equipment
	Standard	Options	
<ul style="list-style-type: none"> - Models FM Approved - All steel construction - 8, 10, and 12 foot depths; up to 50 feet in length - Designed for occupancy by personnel - Supplied fully assembled 	<ul style="list-style-type: none"> - Compliant spill containment sump made of steel - Lifting eyes* 	<ul style="list-style-type: none"> - Shelving systems - Lockable hinged or roll-up doors - Explosion-proof lighting - Mechanical ventilation - Choose between blue, tan, and white paint colors 	<ul style="list-style-type: none"> - Cooling unit/ air conditioning - Heat insulation - Heating system - Special dimensions - "Frost-free" version for temperature-sensitive substances - 2 and 4-hr fire rated models

A versatile range of accessories is available to meet your requirements on further individual equipment (see page 16).

*Buildings only to be lifted when empty





Numerous Building configurations enhance your ability to create the right enclosure for any application

Choices of 8, 10, and 12 foot depths and lengths from 8 to 50 feet allow more flexibility to add shelving systems, combine storage and mixing/dispensing functions, or to enclose and secure hazardous processing equipment like pumps. While inside the enclosure, personnel are able to work with materials over a compliant spill containment sump.

Typical Applications

- Storage of multiple, manually handled drums and small containers
- Housing and enclosing of hazardous processes such as pumping, mixing, and dispensing
- Secured, isolated storage of toxic or dangerous chemicals
- Satellite supply storage for fuels or lubricants
- Waste collection and sorting



Standard 12 x 8 building. Choose white, blue, or tan as standard colors



Buildings allow for remote placement, while still providing ample work space for periodic occupancy of personnel

Excerpt from our complete program:

Storage Capacity (55-gal drums)	Load Capacity (lbs)	Sizes L x D x H	Sump Volume (gal)	Floor Space (sq ft)	Inside Dimensions (in)			Door Opening (in)	
					Length L	Depth D	Height H	Width W	Height H
16	30,761	10 x 10 x 9	330	80	113	112	86	54	80
20	37,294	12 x 10 x 9	400	89	137	112	86	54	80
28	50,361	16 x 10 x 9	541	133	185	112	86	54	80
36	63,428	20 x 10 x 9	681	169	233	112	86	54	80
44	76,494	24 x 10 x 9	821	205	281	112	86	54	80

Buildings for housing hazardous processes

Process Buildings

With the addition of standard and custom options and engineered construction, DENIOS Buildings are frequently utilized to house hazardous processes like pumping, mixing, heating, and dispensing. Designs include 2 and 4-hour fire rated construction as well as damage limited wall panels.

Process Applications include:

- Paint kitchens
- Pumping operations
- Battery Testing Enclosures
- Fuel Component Enclosures



Customized chemical storage building engineered to accommodate and function with customer processing equipment



Heated and cooled Storage Building with fire suppression system, fire rated construction, and explosion-relief panels designed to house automotive paint pumping equipment

Excerpt from our complete program:

Storage Capacity (55-gal drums)	Load Capacity (lbs)	Sizes L x D x H	Sump Volume (gal)	Floor Space (sq ft)	Inside Dimensions (in)			Door Opening (in)	
					Length L	Depth D	Height H	Width W	Height H
25	43,288	12 x 12 x 9	464	114	137	130	86	54	80
35	58,455	16 x 12 x 9	627	156	185	130	86	54	80
45	73,622	20 x 12 x 9	790	197	233	130	86	54	80
55	88,788	24 x 12 x 9	952	239	281	130	86	54	80
65	103,955	28 x 12 x 9	1,115	281	329	130	86	54	80
75	119,122	32 x 12 x 9	1,278	322	377	130	86	54	80
85	134,288	36 x 12 x 9	1,441	364	425	130	86	54	80
95	149,455	40 x 12 x 9	1,603	405	473	130	86	54	80



DENIOS Engineering leads the industry in the design and manufacture of customized enclosures designed for the safe storage of chemicals

We provide solutions for the safe storage of

- Flammables or flammable/explosive processes
- Acids or caustic chemicals
- Temperature sensitive chemicals, whether for preservation heating/cooling or process heating/cooling
- Completely customized enclosures provide added access for personnel, material handling equipment, or the incorporation of the structure into your existing processes or facilities

DENIOS Engineering provides you

- A complete understanding of hazardous chemicals and chemical processes
- Expert knowledge of regulations and fire codes
- A technical sales staff and engineering department working with you every step of the way in designing a safe storage solution for your unique application



Temperature controlled cabinets provide process heating or cooling capabilities for stored chemicals

Customized chemical storage Building with optional door location, fire rated construction, and heating system



DENIOS standard designs provide solutions for the majority of chemical storage and processing applications. In some cases, customers have applications unique to their plant or industry- and we work with them to provide solutions.



Heated Cabinet for processing stored chemicals

Custom Engineered Options may include:



A crane system to ease drum handling



Emergency shower for personnel safety



Optional explosion proof lighting, fiberglass grating, and fire rated rollup doors



Shelves allow for efficient storage of smaller containers and tools



Acid resistant sump liner to protect the sump when storing aggressive chemicals



Enhance visibility and safety by adding lighting



DENIOS Temperature Controlled Enclosures can be designed for preservation heating/cooling of temperature sensitive chemicals or provide higher temperatures for process heating

- Designs provide thermostatically controlled steam, heat transfer fluid, or electrical heat and air cooling systems
- Air circulation/ventilation systems ensure proper heat/cooling distribution
- Enclosures are constructed with fully insulated, fire resistant walls and doors
- Typically employ hinged doors with perimeter gasketing and multi-point latching locks to maintain internal temperatures
- As with all DENIOS enclosures, structures feature an enclosed, compliant spill containment sump

Designed and Manufactured for Safe Chemical Processing

Process heating/cooling of chemicals has inherent dangers. DENIOS enclosures address many of those risks through their standard construction and with many safety options.

- Insulated, 2-hour fire rated wall construction (standard on all models)
- Explosion relief panels
- Over temperature controls/alarm systems
- Explosion-proof mechanical exhaust ventilation
- In addition, all models are suitable for outdoor placement, away from personnel and facilities
- Can achieve temperature ranges from 0°F to 300°F



Heated Cabinet for frost free storage of two IBC Totes



Call 800-216-7776 for a free, no obligation consultation.



Steam heat system with blower/fan for even distribution of heat



Fire rated Cabinet with electric heat system

Industries served by DENIOS temperature controlled enclosures include:

- Foods and Flavorings
- Pharmaceuticals
- Cosmetics
- Paint and Ink Manufacturing
- Chemicals
- Rubber and Plastics

Refrigerated and insulated cabinet to protect chemicals against high temperatures

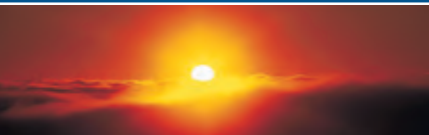


Effective solutions for thermal processing of materials.

- Optimal solution for thermal treatment of large and small amounts of stored material
- High capacity: up to 48 55-gallon drums or 12 IBCs
- Heat output and air circulation are perfectly adjusted and are combined with uniform heat distribution to ensure a uniform temperature profile

Heating Cabinets with electric heating and circulating air fan for optimal air circulation





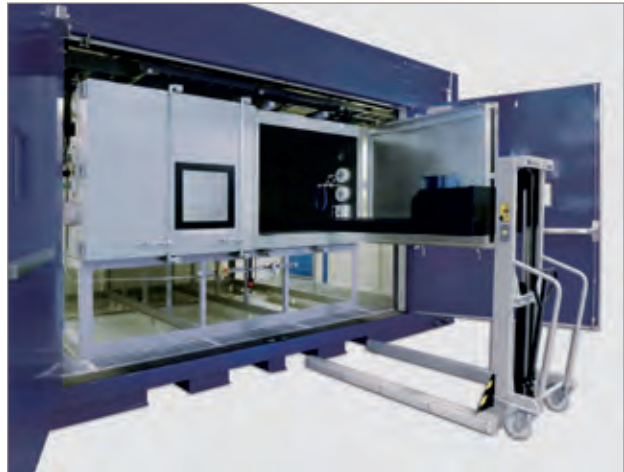
DENIOS Building and Cabinet designs can be engineered to provide 2 or 4-hour fire rated protection

Engineered Options for DENIOS Fire Rated Enclosures may include:

- UL approved firewalls, designs include 2 and 4-hour fire rated construction
- Deflagration panels to redirect destructive forces in case of an explosion
- Fire, fume, or leak detection alarms
- Dry or wet fire suppression systems
- Ventilation systems to remove noxious or ignitable fumes
- Spill containment sumps which meet/exceed EPA, UFC, NFPA, and OSHA regulations
- Heating/cooling options for temperature sensitive chemicals
- Special coatings and materials for the storage of acids, caustics, or corrosives

Utilizing UL Approved wall and door construction, DENIOS standard Building and Cabinet designs can be made to safely and securely store flammable and combustible chemicals and processes.

Great for distribution facilities with inventories of flammable products/chemicals. Cabinets can easily be placed in existing storage aisles- easing material handling and eliminating the need for costly reconstruction.



Fire Rated Buildings can house and segregate hazardous processes, like battery testing, away from personnel and facilities

i Call 800-216-7776 for a free, no obligation consultation.



Storage Cabinet, with fire rated roll-up doors and two-sided access provides convenient access to stored products



Fire Rated designs up to 4-Hr, heating systems for Freeze Protection



Choose either Building or Cabinet designs to best fit your application

DENIOS Fire Rated Buildings

- Primarily used for storing flammable chemicals or to isolate hazardous processes
- Provide pre-engineered rooms separating flammable chemicals and/or processes such as pumping, dispensing, or mixing
- Designs allow for indoor or outdoor placement. Interior walls can be added to separate dangerous chemicals from processes

DENIOS Fire Rated Cabinets

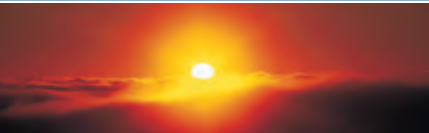
- Primarily designed for the storage of flammable chemicals or products on pallets or in totes
- Provides for indoor or outdoor placement. Designs provide for multiple storage tiers and one or two sided access
- Cabinet with self closing doors to keep fires outside of or limited to the inside of the enclosure



Single-tiered, double-sided Cabinet with fire suppression, a heated bay, and roll-up doors



16 x 10 Fire Rated Building holds up to 28 drums. Shown here with optional door sets and integrated shelving package



Chemical Storage Lockers

DENIOS provides the most complete drum Locker program available. Designed for small volume storage of drums and IBC Totes, DENIOS' Locker Program manufactures a variety of models; from secured, basic storage of non-combustible chemicals to more robust designs for hazardous applications, including 2-hr fire rated construction.

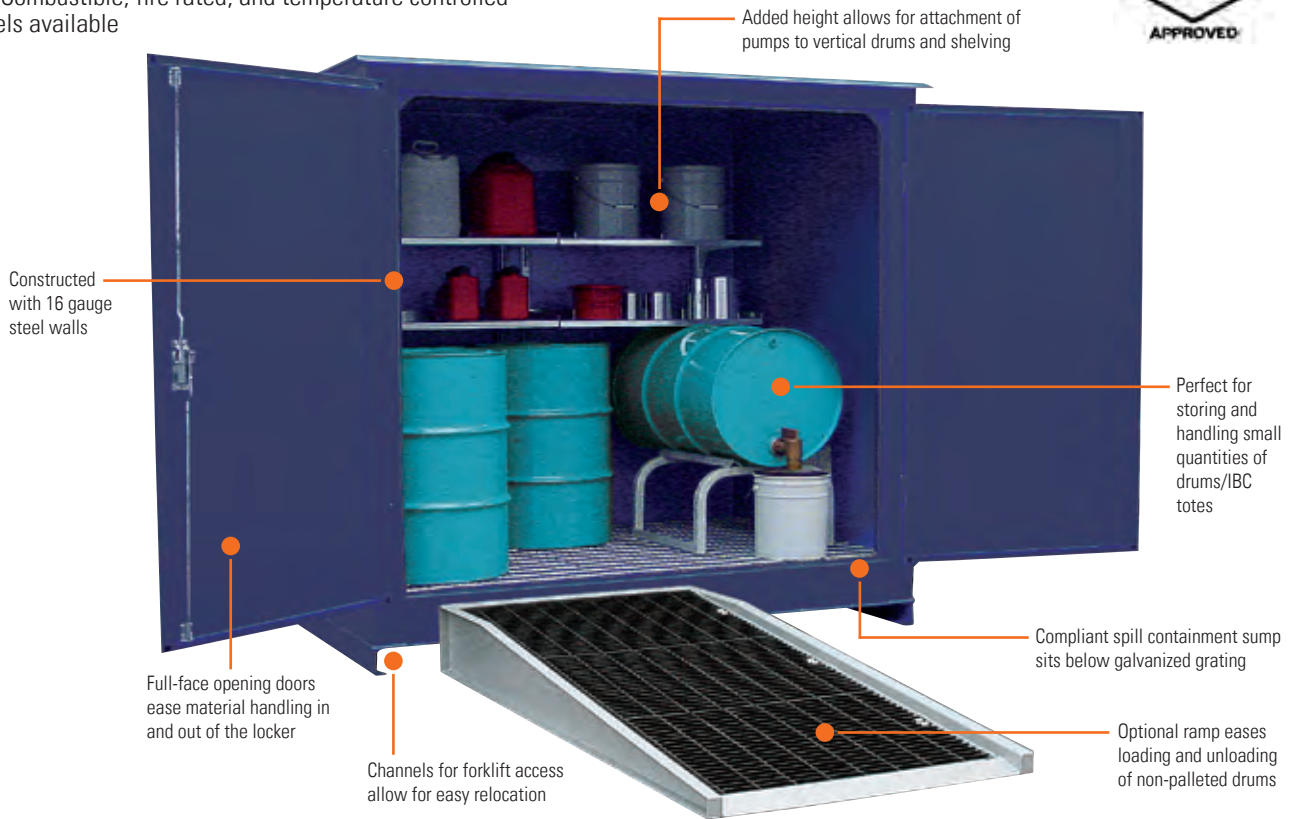
Sizes and Styles

- Locker capacities from 2-14 drums, 1-2 IBC totes
- All units are built to accommodate indoor and outdoor placement. Door styles vary and include hinged doors and roll-up doors
- Locker and door heights allow added headroom for attachment of mixers or pumps for dispensing/processing
- Non-Combustible, fire rated, and temperature controlled models available

Common Applications for Lockers:

- Outdoor storage of small volumes of hazardous chemicals
- Rail, marine, truck, and DOT terminals, storing/dispensing lubricants and oils
- Laboratory environments
- Parks, turf, and nursery centers for storage of fertilizers and pesticides
- Temperature controlled outdoor storage of raw materials
- Hazardous waste accumulation centers

The majority of DENIOS Lockers are FM Approved – see individual pages for details.



Locker program overview:

K-Series	PK-Series	N-Series	Specialty	IBC Tote	Heated
These light duty, economy Lockers provide for 1, 2, 4, and 8 drum capacities. Great for secured storage of non-hazardous chemicals. (See page 21)	Non-combustible and 2-hr fire rated construction models handle 2, 4, 6, and 8 drum capacities. FM Approved. (See page 21)	Our most complete Drum Locker series, features non-combustible, damage limiting, and 2-hr fire rated construction models, 2-14 drum capacities, and numerous options. FM Approved. 90 and 150 MPH rated designs. (See page 22)	2-hr, fire rated construction with automatic closing roll-up doors. 2 to 8 drum capacities. FM Approved. 90 and 150 MPH rated designs. (See page 22)	Non-combustible, 2-hr fire rated, and special dispensing models highlight these 1-2 tote capacity designs. Numerous options also available. Most models FM Approved and provide 90 and 150 MPH rated designs. (See page 23)	Heated Lockers Provide Temperatures up to 350° F for Chemical Process Heating Applications Great for Pre-Heating, Melting, or Normalizing Products Prior to Processing. (See page 23)

K-Series Lockers

These light duty, economy Lockers provide for 1, 2, 4, and 8 drum capacities.

Great for secured storage of non-hazardous chemicals.

- Steel construction provides strength and durability
- 66 gallon sump meets EPA and UFC requirements
- Four way forklift access makes relocation easy
- Lockable hinged door provides added security and opens wide for easy access to drums/containers



Description	Dimensions L x W x H (in)	Nominal Interior Dim. L x D x H (in)	Door Opening W x H (in)	Sump Capacity (gal)	Load Capacity (lbs)	Shipping Weight (lbs)
1 Drum	33 x 33 x 82	30 x 30 x 59	28 x 61	66	600	462
2 Drum	58 x 33 x 76	50 x 30 x 59	54 x 61	66	1,200	616
4 Drum	58 x 58 x 73	55 x 55 x 59	28 x 61	66	2,400	882
8 Drum	116 x 58 x 73	110 x 55 x 59	64 x 61 (2 doors)	140	4,800	1,762

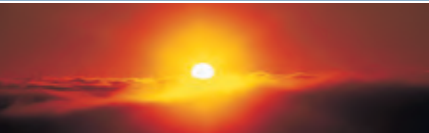
PK-Series Lockers

- 72" interior headroom allows accessing vertically placed drums for pumping / dispensing
- Easily removable, galvanized steel grating
- Sump volumes meet EPA and UFC requirements
- Lockable hinged doors with inside release
- Add shelving for smaller containers
- Passive ventilation
- Exterior grounding lug
- Anchoring point
- NFPA 701 placard
- Choose between blue, tan, or white painted finish
- Also available: non-combustible and 2-hr fire rated construction models handle 2, 4, 6, and 8 drum capacities
- FM Approved
- Options include ramp, interior and exterior lighting, shelves, and a fire bottle



All Lockers have wide, full-face opening doors for easy access and pallet loading

Description	Dimensions L x W x H (in)	Nominal Interior Dim. L x D x H (in)	Door Opening W x H (in)	Sump Capacity (gal)	Load Capacity (lbs)	Shipping Weight (lbs)
2 Drum	95 x 58 x 88	55 x 44 x 71	51 x 71	65	600	3,000
4 Drum	96 x 70 x 88	55 x 56 x 71	51 x 71	97	1,200	3,400
6 Drum	118 x 70 x 88	77 x 56 x 71	73.25 x 71.5	135	2,400	4,100
8 Drum	143 x 70 x 88	102 x 56 x 71	98 x 71	178	4,800	4,800



N-Series Lockers

Our most complete Drum Locker series, features non-combustible, damage limiting construction, and 2-hr fire rated construction models, 2-14 drum capacities, and numerous options. FM Approved. 90 and 150 MPH rated designs.

- 10, 12, and 14 drum models feature multiple door sets to ease access to and handling of drums. Lockable door handles feature inside release mechanism for added safety/security
- Designs are FM Approved
- Features the same, quality construction advantages of our PK Series, but provides added capacities and options (see below)



Lockers for 2-14 Drum, 2-hr fire rated design is constructed with UL Approved firewalls

Description	Dimensions L x W x H (in)	Nominal Interior Dim. L x D x H (in)	Door Opening W x H (in)	Sump Capacity (gal)	Load Capacity (lbs)	Shipping Weight (lbs)
2 Drum	96 x 58 x 98	56 x 42 x 81	52 x 79	77	1,200	3,000
4 Drum	96 x 70 x 98	56 x 52 x 81	52 x 79	99	2,400	3,400
6 Drum	118 x 71 x 98	77 x 52 x 81	52 x 79	125	3,600	4,000
8 Drum	143 x 71 x 98	102 x 52 x 81	52 x 79	165	4,800	4,800
10 Drum	168 x 71 x 98	127 x 52 x 81	52 x 79 (2 doors)	205	6,000	5,500
12 Drum	193 x 71 x 98	152 x 52 x 81	52 x 79 (2 doors)	245	7,200	6,400
14 Drum	236 x 71 x 98	195 x 52 x 81	52 x 79 (2 doors)	315	8,400	7,800

Specialty Lockers

2-hr fire rated construction with automatic closing roll-up doors. 2 to 8 drum capacities. FM Approved. 90 and 150 MPH rated designs.

- Lockers have the same extended height allowing ample room for pumping and other activities
- Roll-up door has fuse link, automatically closing the door in case of fire

Doors are UL Labeled and rated for 1 1/2 hours in accordance with FM Standards and NFPA regulations.

Options for N-Series and Specialty Lockers include:

- Ramp and Shelves
- Fire Bottle (FE-241)
- Dry Chemical fire suppression system
- 1.8 or 3.6kw electric heater with R-10 insulation
- 15,000 BTU air conditioner with R-10 insulation
 - Interior light (300W) with fan (350 CFM)
 - Exterior light (175W) with photo eye
 - Fiberglass grating and poly sump liner for storing acids/caustics



2-8 Drum Locker shown with optional white color and dry chemical fire suppression (sold separately)

IBC Tote Lockers

Non-combustible, 2-hr fire rated, and special dispensing models highlight these 1-2 tote capacity designs. Numerous options also available. Most models FM Approved and provide 90 and 150 MPH rated designs.

- Built to carry higher loads from IBCs
- Sump volumes meet or exceed EPA and UFC requirements
- Lockable hinged doors provide full face opening, easing material handling in and out of the Locker
- DLC (Damage Limiting Construction) wall construction available utilizing deflagration panels

Available options include:

- Fire Bottle (FE-241)
- Dry Chemical fire suppression system
- 1.8 or 3.6kw electric heater with R-10 insulation
- 15,000 BTU air conditioner with R-10 insulation
- Exterior light (175W) with photo eye



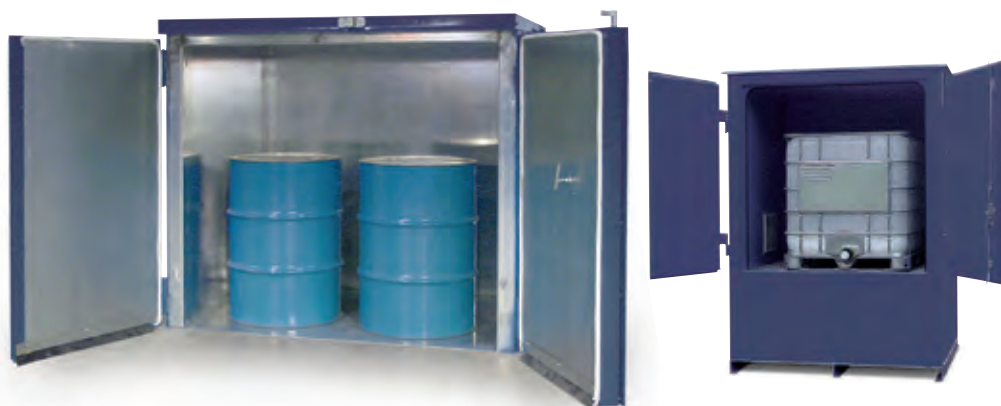
2-IBC Tote Locker's double, full face opening doors allow easy access to both totes

Description	Dimensions L x W x H (in)	Nominal Interior Dim. L x D x H (in)	Door Opening W x H (in)	Sump Capacity (gal)	Load Capacity (lbs)	Shipping Weight (lbs)
90 MPH 1-IBC	99 x 70 x 100	69 x 62 x 61	56 x 61	559	5,000	2,300
90 MPH 2-IBC	153 x 70 x 88	123 x 62 x 61	55 x 61	501	10,000	3,100
150 MPH 1-IBC	99 x 70 x 100	87 x 61 x 61	56 x 61	506	5,000	2,300
150 MPH 2-IBC	153 x 70 x 88	121 x 61 x 64	110 x 61	501	10,000	2,900
150 MPH/DLC 1-IBC	99 x 70 x 100	67 x 61 x 61	54 x 60	560	5,000	2,300
150 MPH/DLC 2-IBC	153 x 70 x 88	121 x 61 x 64	108 x 60	501	10,000	2,900

Heated Lockers

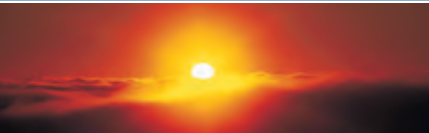
Heated Lockers Provide Temperatures up to 350°F for Chemical Process Heating Applications. Choose between electric and steam heat, spill sump and floor level models.

Great for Pre-Heating, Melting, or Normalizing Products Prior to Processing.



Description	Nominal Dimensions L x D x H (in)	Inside Chamber L x D x H (in)	Shipping Weight (lbs)
1 Drum	47 x 55 x 64	40 x 37 x 58	1,100
2 Drum	67 x 55 x 64	60 x 37 x 58	1,475
4 Drum	67 x 69 x 64	67 x 69 x 64	1,815
1 IBC	67 x 69 x 74	67 x 69 x 74	1,925

i Call 800-216-7776 for a free, no obligation consultation.



Cabinet, Building, and Locker Options



Smoke / heat detectors & fire alarms

For the protection of fire proof containers it is important that an early warning system is installed. DENIOS uses certified multi sensors for this purpose. Smoke and fire detection is quick and reliable and can be installed in conjunction with a siren. The alarm system can be connected to the main alarm system.



Temperature regulators

When stored, many substances require a constant temperature to avoid loss of quality or to prevent dangerous reactions. DENIOS uses the most up-to-date temperature regulators to ensure user friendly programming of required temperatures. The majority of DENIOS regulators can be programmed and adjusted on the main control box on the exterior of the container.



Alarm lights

In addition to audible alarms DENIOS can provide alarm lights to work in conjunction with the main alarm system, enhancing the warnings effectiveness to personnel.



System monitoring

To monitor important features such as temperature, pressure, air quality etc., it is possible to install an assortment of sensors to the container. A continuous monitoring system can be installed to your specific requirement and standards. The system can be monitored in situ or attached to the main computer system which ensures a regular and safe way to monitor air flow etc.



Sprinkler systems

Sprinkler systems provide extra safety in containers used to store flammable and non-flammable substances. DENIOS offers several types of sprinkler systems. We can provide, standard, heavy foam, powder, Novec or CO2 systems.



Gas detectors

When storing dangerous substances, inappropriate use can result in severe health problems, as well as dangerous environmental damage. If poisonous gases are allowed to escape then early detection is a vital requirement. DENIOS can provide gas warning detectors where a pre-set level can be set and when reached an audible or visual alarm or both will occur.



Fire dampers

Where air circulation is required, fire dampers can be installed featuring automatic closing air vent mechanisms. These close automatically as soon as fire is detected, thus cutting off the supply of oxygen to the fire source in the container.



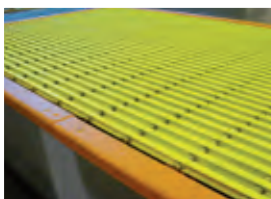
Leak Detector

Leak detectors can be installed in sumps to detect any leakage from container contents. The alarm can be audible, visual or both. Early detection allows prompt action to be taken.



PE and stainless steel sump liners

When storing acids, alkalis or other aggressive substances, it is recommended that sump liners be installed. These can be manufactured both in PE and stainless steel. Further information regarding sumps can be found in our main catalog.



Grating

DENIOS fire proof containers are fitted with galvanized grating as standard. Alternative grating are available however and when storing aggressive substances, stainless steel grating or synthetic material grating can be provided.



Grounding kits

Grounding kits are required to avoid an electric discharge between the container and other conductive units. All DENIOS hazmat containers can be fitted with an accessory to avoid discharges. These are highly recommended for containers storing explosive materials.



Special paint finishes

DENIOS offers internal as well as external multi color finishes.



Heating / cooling

Many substances require optimal heating or cooling storage to maintain quality. DENIOS provides heating systems using electric or steam heat.



Insulation

The walls of our hazmat insulated system containers guard against loss of energy, temperature and frost damage. DENIOS use different types of material ranging from a thickness of 60 to 125 mm.



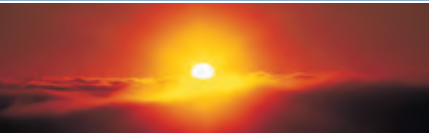
Air conditioning units

DENIOS engineering provide precise solutions to temperature control, such as cooling units and air conditioning systems. With DENIOS expertise we always have a solution for your needs.



Fire prevention air vents

Where air circulation is required, fan-forced air vents can be installed featuring automatic closing air vent mechanisms. These close automatically as soon as fire is detected, thus cutting off the supply of oxygen to the fire source in the container.



Spill Decking

DENIOS Pre-engineered spill decks provide compliant, modular spill containment for in-plant dispensing operations.

Individual decks are 5" deep and sized from 4' x 5', 5' x 5', 4' x 6', to 5' x 6'. This provides for multiple configurations and the flexibility to build around walls, columns, bollards, etc. Custom sizes also available.

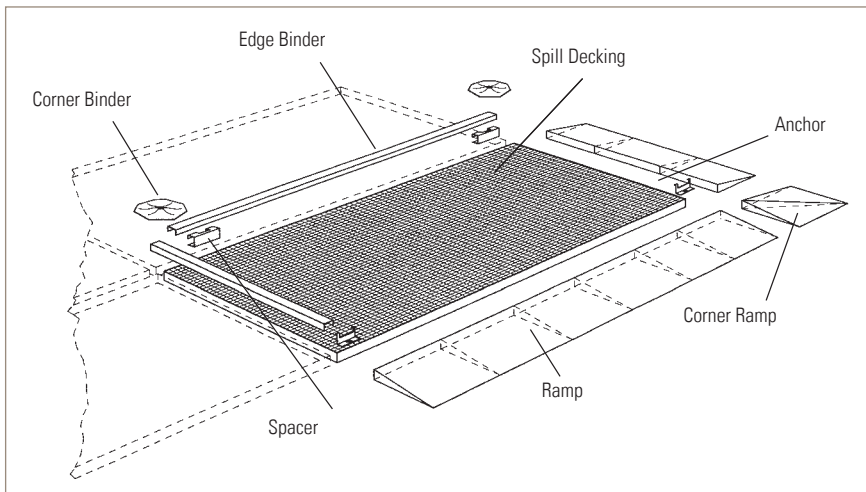
Optional ramps ease material handling on and off the deck surface.

Galvanized grating is mounted above the spill sump, providing a storage base for drums, totes, dispensing racks, shelving.

In case of a spill, grating can be easily removed for clean-up / recovery.



Exclusive 5" decking provides secure spill containment and leak barrier for larger volume dispensing



Joining components and anchoring hardware available for systems, please call for quote

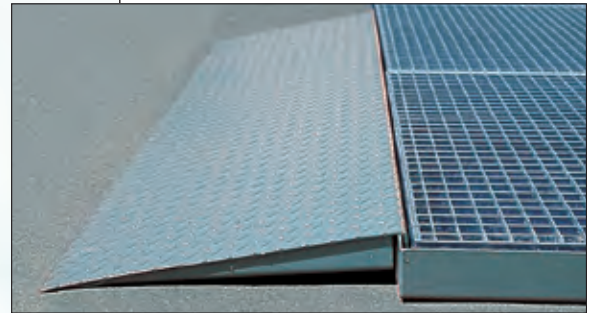
Durable steel construction provides added safety when dispensing flammables

5" Deep Modular Spill Decking provides economical compliance solutions for pre-existing areas

- Simplifies general house-keeping and maintenance in storage and dispensing areas
- **Sump volumes are compliant with EPA and UFC spill containment regulations for 55-gallon drums**
- Constructed of heavy gauge, corrosion resistant galvanized steel
- Welds are 100% inspected with low-viscous test to insure leaktightness
- Relocatable and expandable
- Easy to install and clean up
- Binder and anchor accessories secure systems in place
- **For forklift and truck traffic, please call for a free consultation- 800-216-7776**



Custom constructed Spill Decks allow for truck and forklift access

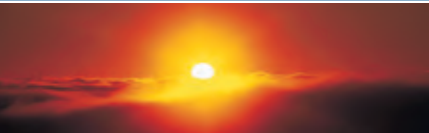


Ramps provided in lengths matching standard spill decking dimensions

Decking systems can be quickly and easily set up, reconfigured, or relocated as requirements dictate

Spill Decking (ft)	Outside Dimensions (in)	Overall Height (in)	Sump Volume (gal)	Load Capacity (lbs)	Shipping Weight (lbs)
4 x 5	49 x 61	5	66	350 psf	432
5 x 5	61 x 61	5	77	350 psf	513
4 x 6	49 x 73	5	74	350 psf	501
5 x 6	61 x 73	5	93	350 psf	595

Ramp (ft)	Outside Dimensions W x L (in)	Overall Height (in)	Shipping Weight (lbs)
4	48 x 25	5	67
5	60 x 25	5	83
6	72 x 25	5	109



Automatic Doorway Spill Barriers

In cases of catastrophic spills or sprinkler releases, containing the spill to a single room or area can limit the costs associated with clean-up or facility damage.

DENIOS Automatic Doorway Spill Barriers provide the protection to contain those large spills by closing off any doorway or opening in the affected room at the first sign of flowing liquids.

Federal Regulations along with Local Jurisdictions require that sprinkler water in combination with regulated or hazardous materials be prevented from being released into the environment via sewers, streams, or ground contamination. When a release occurs, fines and clean-up costs can be staggering.



Barriers prevent spills from reaching storm drains or contaminating ground water

NFPA-30 4.4.2.5

Curbs, scuppers, special drains, or other suitable means shall be provided to prevent the flow of liquids under emergency conditions into adjacent building areas.

UFC-60.4.6.3.4

Secondary containment for indoor storage areas shall be designed to contain a spill from the largest vessel plus the design flow volume of fire-protection water calculated to discharge from the fire-extinguishing system over the minimum required system design area or area of the room... for a period of 20 minutes.

OSHA 1910.106 (e) (3) (iv) (a)

Emergency drainage systems shall be provided to direct flammable or combustible liquid leakage and fire protection water to a safe location. This may require curbs, scuppers, or special drainage systems to control the spread of fire.

OSHA 1910.106 (d) (4) (i)

Openings to other rooms or buildings shall be provided with non-combustible liquid-tight raised sills or ramps at least 4" in height.



When not deployed, the Barriers lay flat, allowing normal vehicular or pedestrian traffic

Fully automatic operation ensures barrier will close even in cases of power loss

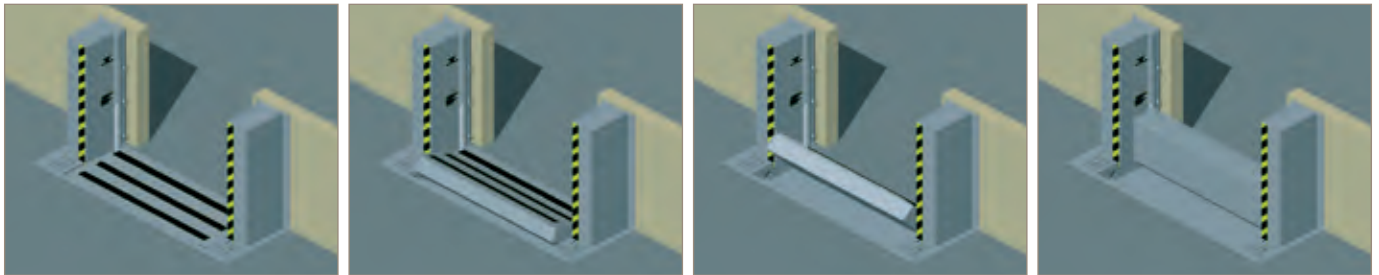
Features of the Automatic Doorway Spill Barrier Include:

- Solid welded stainless steel construction
- Self-contained one piece system design
- Fully automatic operation, no external power source or factory compressed air required
- Easy installation in existing doorways; stores horizontally in the floor, permitting unobstructed vehicular and personnel traffic until a spill occurs
- While laying flat, barrier provides up to 6.5 tons axle weight capacity
- Designed to fit in doorways between 3 and 16 feet, with barrier heights of 12 to 24 inches



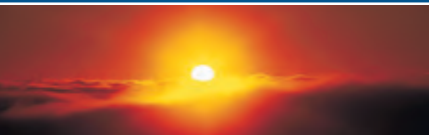
Automatic Doorway Spill Barriers are often utilized as containment equipment for Flammables Storage Rooms

Operation - Flow of liquid triggers the Barrier to automatically shut



When not deployed, barrier door stores flat in floor, eliminating the need for ramps or berms. Automatically closes with introduction of liquid in the built-in collection sump, creating a liquid tight seal and containing the spill in the room where it originated

Nominal Width of Door (ft)	Model Number – 12-inch Liquid Retention Height	Model Number – 18-inch Liquid Retention Height	Model Number – 24-inch Liquid Retention Height	Opening Span (in)	Sealed Width (in)
3	R11-0312	R11-0318	R11-0324	36	40
4	R11-0412	R11-0418	R11-0424	48	52
6	R11-0612	R11-0618	R11-0624	72	76
8	R11-0812	R11-0818	R11-0824	96	100
10	R11-1012	R11-1018	R11-1024	120	124
12	R11-1212	R11-1218	R11-1224	144	148
14	R11-1412	R11-1418	R11-1424	168	172
16	R11-1612	R11-1618	R11-1624	192	196



DENIOS' Exclusive HazBerm creates large, modular containment areas within facilities – a more efficient alternative to conventional berms and curbs



- Patent-Pending modular design allows for custom sizing for each application
- Polymer concrete segments are highly chemical and fire resistant
- Use in combination with Doorway Spill Barriers to allow easy transport in and out of the Berm Area
- Systems are easily supplied and installed
- Easily relocated or altered as needs change – no need to jack-hammer and replace the existing system
- Available in tan or black
- Does not require floor footers, forms, or on-site concrete pouring



The HazBerm can be placed around processing equipment to contain potential leaks and spills



Segments seal together to form a virtually leak-proof barrier

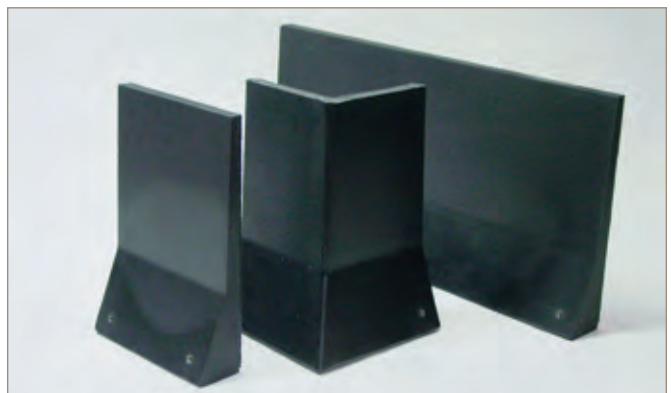


HazBerm is both chemical and fire resistant



Combine with Manual or Automatic Doorway Spill Barriers to allow easy access to stored chemicals

Description	Dimension L x D x H (in)	Shipping Weight (lbs)	Order Number
3' Straight	36 x 4 x 18	90	Tan: R05-0230 Black: R05-0231
1' Straight	12 x 4 x 18	29	Tan: R05-0210 Black: R05-0211
1' Corner	Inside: 8 x 4 x 18 Outside: 12 x 4 x 18	44	Tan: R05-0290 Black: R05-0291
1' Reverse Corner	Inside: 8 x 4 x 18 Outside: 12 x 4 x 18	44	Tan: R05-0292 Black: R05-0293



The HazBerm is available in 1 and 3 foot segments as well as the 1 foot corner and reverse corner segments. (Reverse corner not shown. Hardware included, but not shown.)

An extra bonus in selection and information 24 hours a day...

www.denios-us.com



Just click away!

- **The DENIOS web site** is open all hours. Comprehensive, informative and now with even greater choices.
- **Take a look at our site and bookmark the page** as a favorite in your browser.
- **Check back often!** We're constantly adding new products and information to the site. Stay updated with the latest innovations in chemical storage and spill containment at denios-us.com.
- **Easy-to-use search engines:** You'll always find what you're looking for!
- Place an order whenever you want: **Open twenty-four hours a day!**
- Easy to navigate site highlights the most innovative chemical storage products!
- Success stories, **technical brochures** and much more!
- Presentation of innovative developments, including **product videos!**
- **Info pages** with extracts from current regulations!



» We want to make sure our catalog reaches the right people at the right address.

» If your address is incorrect, please call us at **800-216-7776** and we'll fix it immediately. And if you don't wish to receive the catalog, please don't throw it away- pass it along to a co-worker who deals with industrial chemicals, safety, or maintenance.

Thank you!

DENIOS

"Working for a
safer workplace
and environment."

Responsibility

For your facilities.
For your personnel.
For your community.

DENIOS, Inc.

1152 Industrial Blvd.

Louisville, KY 40219

Phone: 502-933-7272 or 800-216-7776

Fax: 502-933-1560

E-Mail: info@denios-us.com

www.denios-us.com

The DENIOS Vision

DENIOS is the worldwide leader in hazardous materials storage, industrial environmental protection, and workplace health and safety. Our highly motivated and skilled team is constantly searching for new ideas and creative innovations, making a positive impact in shaping the future. We provide customer benefits through exceptional product quality, prompt delivery and outstanding customer support and communication.

DENIOS pledges to be a confidence inspiring project partner and reliable problem solver for all environmental protection and workplace safety applications.

