

Gas Safety Cabinets

Model 9-1SC

Protect workers and equipment by preventing gas-related accidents at the source.

Improper gas cylinder storage can cause serious workplace hazards. Gas users must be aware of the dangers associated with storing and using compressed gases, including potential for asphyxiation, flammability, toxicity and high-pressure hazards. Gas leaks due to improper handling, regulator failure, mechanical stress and corrosion are common in many industrial and laboratory facilities. Hazardous and corrosive gases such as hydrogen chloride, chlorine or ammonia should be isolated from the workplace to minimize personnel exposure from toxic leaks. Safe cylinder gas storage is also addressed in Federal and local OSHA building and fire codes.

Model 9-1SC Cylinder Gas Cabinets are designed to provide a safe and cost-effective means to isolate hazardous gas cylinders from the surrounding workplace.



Benefits/Features

11-gauge steel with diamond deck flooring provides one of the sturdiest constructions available.

Integral sprinkler system provides an extra measure of fire protection.

Horizontally and vertically adjustable cylinder brackets accommodate a large range of cylinder sizes.

Wide range of standard and custom manifold configurations to suit your application.

Meets International Building Code, Federal OSHA, Cal OSHA, NFPA, SEMI Standards and International Fire Codes

Epoxy painted texture finish on outside and smooth finish on inside enhances cabinet appearance.

Louvered panel on base of door(s) provides maximum coverage of air flow through cabinet.

Removable white back panel on inside rear of cabinet can be used to mount the gas delivery system.

Door(s) and access window(s) close and latch automatically preventing them from being accidentally left open.

Specifications

Integral Sprinkler:

Fuse Rating: 165°F (74°C)

Flow Capacity: 40 GPM

Ventilation: 13 air changes per minute

Exhaust Stack: 6" (152 mm) standard. Other sizes available: 8" (203 mm), 10" (254 mm)

Color: Nitro Blue

Materials of Construction

Cabinet/Door: Steel, 11-gauge, all welded one piece construction

Window: 1/4" wire, reinforced safety glass (hinged top), PTFE bottom catch. One hour rated for fire.

Flooring: Diamond deck, no ramps required

Optional Equipment

Adjustable shelves

Keyed door latch

Air intake filter

Custom cabinets and colors

Fusible link fire damper

Model Number	Description	Dimensions*	Weight
Q9-1SC	1-Cylinder Cabinet	72" x 18" x 18" (183 cm x 46 cm x 46 cm)	245 lbs. (111 kg)
Q9-2SC	2-Cylinder Cabinet	72" x 18" x 24" (183 cm x 46 cm x 61 cm)	285 lbs. (129 kg)
Q9-3SC	3-Cylinder Cabinet	72" x 18" x 36" (183 cm x 46 cm x 91 cm)	370 lbs. (168 kg)
Q9-4SC	4-Cylinder Cabinet	72" x 18" x 48" (183 cm x 46 cm x 122 cm)	395 lbs. (179 kg)

* H x D x W

Additional labor charges may apply for installation of manifold in cabinet.

For bulkhead connection, specify type and location.

Gas cabinets are also available for use with lecture bottles and small capacity cylinders – please consult your Air Liquide representative.

Gas Cylinder Safety Cabinets

Model LGSC

New Expanded Size for Laboratory and Research

Our new laboratory safety cabinets provide a safe and cost-effective means to isolate hazardous gas cylinders from the surrounding workplace and protect cylinders and delivery systems from accidental contact, unauthorized handling and tampering. The cabinet exhaust vent is designed to be coupled with a fan (not supplied) to provide a local exhaust gas control system to maximize operator safety when storing and working with hazardous gases.

Gas cylinder leaks due to improper handling, regulator failure, mechanical stress and corrosion can occur in laboratory facilities. Hazardous and corrosive gases such as hydrogen chloride, chlorine, hydrogen sulfide or ammonia should be isolated from the workplace to minimize personnel exposure to toxic leaks. Safe cylinder gas storage is addressed in Federal and local OSHA building and fire codes.

These new laboratory safety cabinets provide substantial enhancements to those offered by standard industrial gas cabinets. The extended size provides more useable space to accommodate larger cylinders and equipment installations; detachable plate(s) on the roof provides ease of access for custom drilling of conduit and gas piping installations; and a safety eye shield in access window(s) provides additional protection for the operator.

Model LGSC cabinets are available in single, two and three cylinder configurations, and feature a removable back panel attached to strut channels. The removable panel or strut channels can be used for mounting regulators, valves, custom panels and other components of a gas delivery system. Window(s) permits visual inspection and access into cabinet for adjustments while minimizing operator exposure to potential toxic leaks. Water sprinkler head on the ceiling provides for extra fire protection, while adjustable cylinder brackets secure cylinders from falling in the event of a fire or earthquake.

Benefits/Features

All-welded construction using 11-gauge steel (exceeds code requirements) provides for extra structural strength

Extended height and depth design allows for additional space for larger cylinders and equipment installations

Detachable plate on rear of roof provides ease of access for custom drilling of conduit and gas piping installation

Safety eye shield in access window provides additional protection for the operator

Powder-coat painted interior and exterior finish enhances cabinet appearance

Inlet air-louvered panel with filter on base of door(s) provides maximum coverage of air flow through cabinet while minimizing contamination from ambient air impurities

Removable white back panel on inside rear of cabinet can be used to mount the gas delivery system

Adjustable cylinder bracket(s) with chain(s) accommodate a large range of cylinder sizes and secures cylinders to prevent toppling

Neoprene gaskets ensure positive seal around door(s) and window(s)

Door(s) and wire-reinforced safety glass access window(s) close and latch automatically, preventing them from being accidentally left open

Keyed door and window latches prevent unauthorized entry

Fire sprinkler head provides an extra measure of fire protection

Exhaust vent located on top of cabinet designed to connect to a local exhaust gas control system

Durable zinc-plated steel diamond deck flooring for loading and unloading cylinders

Recessed floor mounting holes provide ease of installation

Oil-free door and window closer prevent oil contamination caused by leaking seals

Optional Features

Adjustable cylinder shelves to accommodate smaller sized gas cylinders

Fusible link damper

Outdoor weather-proof model

Custom cabinet colors are available to match users' needs

Cylinder scales

Fixed gas detection and monitoring

Emergency shut-off and alarm systems



Gas Cylinder Safety Cabinets (cont'd.)

Model LGSC

Specifications

Compliances: Uniform Fire Code, Uniform Building Code, International Fire Code, Safety Guidelines for Semiconductor Manufacturing

Integral Sprinkler: 160°F to 165°F activation, coated with bee's wax for protection from corrosive environments

Window: 1/4" thick, wire-reinforced safety glass

Safety Eye Shield: Transparent 0.20" thick

Door Latch: Flush mounted, paddle type

Locks: Matching key lock for door and window

Door and Window Closer: Oil-free PTFE seals

Exhaust Vent Dimensions: See table below

Water Pipe Connection: 1/2" NPTM

Color:

Cabinet: Light gray

Window Frame: Dark gray

Paint: Powder coat

Surface: Textured finish

Flooring: Diamond deck steel over steel flooring with recessed floor mounting holes

Dimensions: See table below

Approximate Weight: See table below

Materials of Construction

Cabinet: 11-gauge cold-rolled steel

Floor: Zinc-plated steel

Gaskets: Neoprene

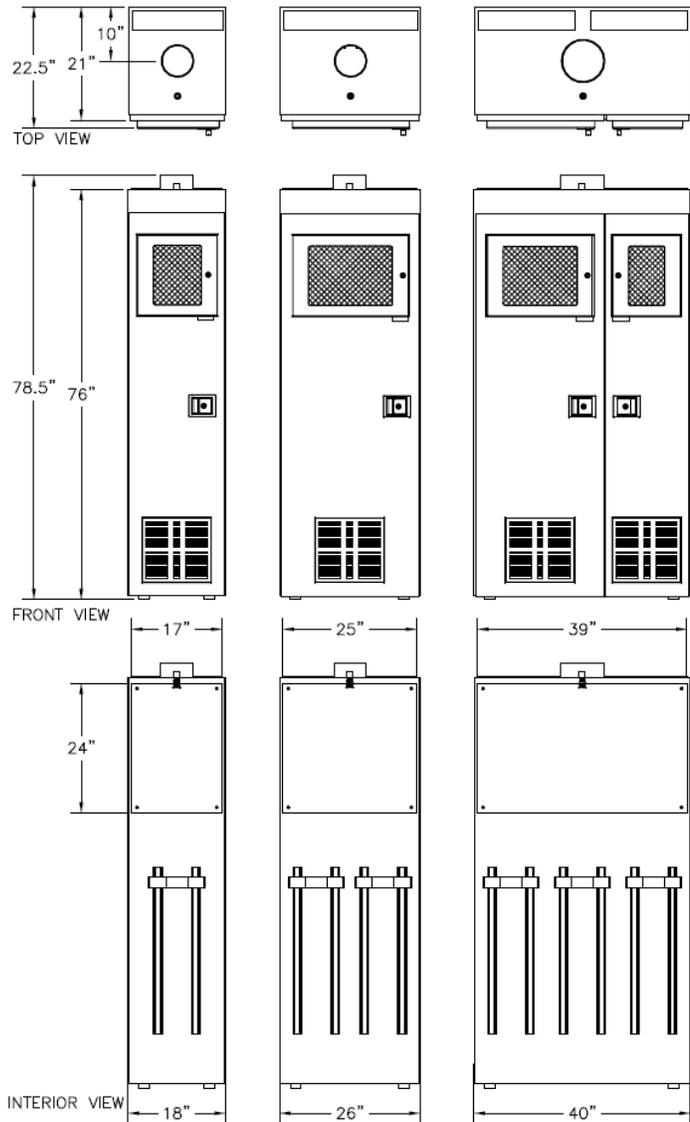
Fasteners and Latch: Stainless steel and PTFE

Removable Back Panel: Schedule 12-steel painted gloss white

Cylinder Straps: 1-1/2" wide polypropylene strap and secondary zinc plated steel safety chain

Filter: Rigid polycarbonate

Safety Eye Shield: LEXAN™ polycarbonate



Ordering Information

Model Number	Cabinet Type	Dimensions (H x D x W)		Exhaust Vent (diameter)		Weight (approximate)	
		in	cm	in	cm	lbs.	kg
QLGSC-1	1-Cylinder	78.5 x 21 x 18	199 x 53 x 46	6	15	280	127
QLGSC-2	2-Cylinder	78.5 x 21 x 26	199 x 53 x 66	6	15	360	163
QLGSC-3	3-Cylinder	78.5 x 21 x 40	199 x 53 x 102	8	20	495	225

Lockable Cylinder Security Cages

Model 9C

Scott™ cylinder storage and security cages provide a convenient way to store high-pressure cylinders safely and securely. Available features on some models include firewalls that meet OSHA compliance requirements for the safe storage of oxygen cylinders located next to fuel gas cylinders, and forklift bottoms and lifting ears to facilitate easy movement. Additional models and variations are also available — please contact your Air Liquide representative for more information.

Benefits/Features

- Provide secure yet portable storage of high-pressure cylinders
- Provide a cost-effective means to store and protect cylinders from unauthorized handling and tampering
- E-Track ratchet straps secure cylinders inside cage
- Forklift bottom & lifting ears (on some models) facilitate easy movement
- Firewall models meet OSHA requirements for safe cylinder storage of oxygen cylinders next to fuel gas cylinders
- Polyester powder-coated paint and smooth gloss surface finish

ESTS models offer an economical option to secure cylinders in a stationary lockable storage container. These units feature 9-gauge expanded metal door and back wall with 14-gauge sheet metal sides. Cylinders are secured with E-Track ratchet straps.

Please note that forklift bottoms and lifting ears are not available on these models — please see our STS models below.

Model Number	Description	Cylinder Capacity	Dimensions (H x W x D)	Color	Weight
Q9C-9ESTS	Cage	9	72" x 34" x 32"	Green	292 lbs.
Q9C-12ESTS	Cage	12	72" x 32" x 42"	Green	345 lbs.

STS models feature expanded metal siding and are equipped with a forklift bottom and four-point lifting ears to facilitate easy movement. 9-gauge expanded metal sides combined with a lockable door and E-Track strapping system keep cylinders secure. The DW2 version incorporates a 14-gauge metal divider wall providing distinct cylinder separation. The FW2 model features OSHA-compliant Marinite® fiberboard firewall design making it possible to securely store your oxygen with fuel gas or acetylene (130 to 300 CF) cylinders in the same cage.

Model Number	Description	Cylinder Capacity	Dimensions (H x W x D)	Color	Weight
Q9C-9STS	Cage with Forklift Bottom	9	85" x 32" x 32"	Green	429 lbs.
Q9C-12STS	Cage with Forklift Bottom	12	85" x 33" x 42"	Green	494 lbs.
Q9C-12STS-FW2	Cage with Firewall	12*	85" x 32" x 42"	Green	663 lbs.
Q9C-20STS	Cylinder Cage	20	79" x 50" x 50"	Green	692 lbs.
Q9C-20STS-DW2	Cage with Divider Wall	20	79" x 50" x 50"	Green	697 lbs.
Q9C-20STS-FW2	Cage with Firewall	20*	79" x 50" x 50"	Green	950 lbs.

*Capacities for size 300CF acetylene cylinders are: 2 for 12STS-FW2 and 6 for 20STS-FW2.

SEC models feature a pallet bottom to provide secure delivery from fill plants for delivering nitrous oxide and poison gases. 9-gauge expanded metal sides combined with a double lockable door and E-Track strapping system keep cylinders secure. These units function with pallet trailers.

Model Number	Description	Cylinder Capacity	Dimensions (H x W x D)	Color	Weight
Q9C-16SEC	Security Cage	16	74" x 42" x 39"	Black	470 lbs.

Please note: specify desired pallet bottom style when ordering to fit your requirements.



9ESTS Cage



20STS-FW2 Cage



16SEC Cage

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Cylinder Racks and Separators

Model 84CS and 84PCS

Model 84CS Cylinder Racks and Separators provide a convenient means to organize gas cylinder storage. These separators fully surround cylinders with 2" square steel heavy gauge tubes welded and sealed with powder-coated epoxy. Two levels of welded steel chains with bit snaps make cylinder racking easy and convenient. The two-chain restraint model allows for the safe storage of both full cylinders and 7 or 7AL cylinders. Dual-restraint should be used for short cylinders and additional seismic protection.

Model 84PCS Process Gas Racks are designed to provide a safe and cost-effective means to mount gas cylinders and delivery systems where wall space is inaccessible. The manifold platform is wide enough for complete manifolds and/or gas control panels. The back-to-back process racks save space where multiple gas cylinders are in use.

SCOTT™ Cylinder Racks and Separators are available in standard and custom configurations from one to 16-cylinder capacities. All listed units meet or exceed requirements for UFC, NFPA, CGA and OSHA, as well as Seismic Zone 4 requirements.

Materials of Construction

Body: Durable 2" (51 mm) square steel tube, all welded assembly

Finish: Powder-coated and UV resistant

The National Fire Code requires that all process gases be anchored to a strong structure while being used. Model 84 gas racking systems provide the necessary support when anchored to concrete with 1/2" (13 mm) steel anchor bolts.

Model Number	Description	Dimensions*	Weight**
Q5-84CS-224	2 Bays 2 cylinders deep	30" x 26" x 30" (76 cm x 66 cm x 76 cm)	120 lbs. (54 kg)
Q5-84CS-234	3 Bays 2 cylinders deep	44" x 26" x 30" (112 cm x 66 cm x 76 cm)	165 lbs. (75 kg)
Q5-84CS-324	2 Bays 3 cylinders deep	30" x 38" x 30" (76 cm x 97 cm x 76 cm)	154 lbs. (70 kg)
Q5-84CS-334	3 Bays 3 cylinders deep	44" x 38" x 30" (112 cm x 97 cm x 76 cm)	211 lbs. (96 kg)
Q5-84PCS-5	Process Gas Rack 2 cylinders wide	25" x 16" x 61" (64 cm x 41 cm x 155 cm)	105 lbs (48 kg)
Q5-84PCS-5BB	Process Gas Rack 4-cylinder, 2D x 2 bay back-to-back	25" x 22" x 61" (64 cm x 56 cm x 155 cm)	139 lbs. (63 kg)
Q5-84PCS-6	Process Gas Rack 3 cylinders wide	36" x 16" x 61" (91 cm x 41 cm x 155 cm)	139 lbs. (63 kg)
Q5-84PCS-6BB	Process Gas Rack 6-cylinder, 2D x 3 bay back-to-back	36" x 22" x 61" (91 cm x 56 cm x 155 cm)	145 lbs. (66 kg)
Q5-84PCS-7	Process Gas Rack 4 cylinders wide	50" x 16" x 61" (127 cm x 41 cm x 155 cm)	145 lbs. (66 kg)
Q5-84PCS-7BB	Process Gas Rack 8-cylinder, 2D x 4 bay back-to-back	50" x 22" x 61" (127 cm x 56 cm x 155 cm)	173 lbs. (79 kg)

* Approximate W x D x H

** Approximate weight – please inquire.

Cylinder Wall Bracket

Model 84W

This cylinder wall bracket is made of rugged cast aluminum. Its compact contour design allows cylinders to fit firmly along the support edge. A 1" (25 mm) wide nylon strap has a nickel-plated nonslip spring catch and buckle for fast adjustment. The bracket can support cylinders up to 14" (356 mm) in diameter. Recessed mounting holes are located in each end of the bracket for easy mounting to wall.



Model Number	Description
Q5-84W	Cylinder Wall Bracket
Q5-84WRS	Replacement Strap

Cylinder Bench Bracket

Model 84B

Gas cylinders can be safely secured to most bench and tabletops with this cylinder bench bracket. Made of rugged cast aluminum, the bracket clamps to any flat surface up to 2.5" (64 mm) thick with a 1.5" (38 mm) overhang, and is tightened by a large handle. The tightening screw has a rubber pad to prevent slippage and damage to the surface. Screw holes in the bracket permit permanent attachment to the surface. Cylinders are held safely in place on the support by a 1" (25 mm) wide nylon strap that has a nonslip spring catch and buckle to accommodate gas cylinders from 4" to 14" (102 mm to 356 mm) in diameter.



Model Number	Description
Q5-84B	Cylinder Bench Bracket
Q5-84WRS	Replacement Strap

Cylinder Hand Truck

Model 82

Single and double-cylinder hand trucks are designed for easy and safe transport of compressed gas cylinders. Both models are manufactured of tubular steel with double welding at all joint areas for added strength and long service life.

Benefits/Features

Dual-rear carriages are retractable and provide greater stability.

Heavy-duty polypropylene cylinder strap.

8" semi-pneumatic main wheels for Model 82S.

10.5" fully pneumatic main wheels for Model 82D.



Model Number	Description
Q5-82S	Single-Cylinder Hand Truck
Q5-82D	Double-Cylinder Hand Truck

Analog Cylinder Scales

Model 88LC

The Model 88LC liquid cylinder scale is a cost-effective way to keep track of liquid gas usage. Its rugged industrial design and convenient features assure a long service life. To operate, the scale indicator is adjusted to the cylinder tare weight and the weight of the contents is read directly. It is recommended for all liquefied gases (N₂O, NH₃, CO₂, fluorocarbons, etc.) and also for use in supercritical fluid applications.

Benefits/Features

- Low profile so cylinders roll on and off without lifting.
- Noncorrosive platform.
- Explosion-proof, hydraulic load cell system.
- Accommodates cylinders from 7" to 16" (178 mm to 406 mm) in diameter.

Specifications

- Dimensions:** 13-1/2" x 18-1/2" x 1-5/8" (343 mm x 470 mm x 41 mm)
- Total Capacity:** 300 lbs. (136 kg) gross
- Maximum Tare:** 200 lbs. (91 kg)
- Accuracy:** 1% full-scale
- Dial:** 4.5" (114 mm) diameter
- Weight:** 25 lbs. (11 kg)

Model Number	Description
Q5-88LC	Cylinder Scale with Analog Readout

Heating and Insulating Cylinder Jackets

Mix several hydrocarbon components in a cylinder, then expose that cylinder to low temperature. You'll have a sticky situation. Heavier molecules drop out of the gas mixture and stick to the cylinder walls, seriously compromising the accuracy of the mixture.

You can, however, prevent hydrocarbon and protocol mixtures from condensing. Our cylinder jackets feature a self-limiting heating cable that prevents overheating. As temperature increases, element resistance rises resulting in lower amperage to the heater. Lower amperage causes a wattage drop, thus limiting maximum attainable temperatures. Scott™ brand cylinder jackets maintain cylinders temperature from 60°F (16°C) to 120°F (49°C) depending on ambient temperature.



Benefits/Features

Eliminates inaccurate calibration and process control caused by temperature-compromised gas mixtures.

Heats and insulates to prevent cylinder contents from condensing.

Even distribution of heating cable prevents hot spots that can cause dangerous cylinder failure.

Velcro®/D-Ring closures ensure a snug fit.

Closed-cell foam insulation, with silicone-impregnated fiberglass liner and polyester exterior jacket, provide long-lasting weather protection.

Ideally suited for natural gas, power plant and utility applications.

Fluoropolymer overjacket protects heat cable from corrosion.

Includes 10' of 3 color-coded conductors in a flexible conduit ready for hard-wiring by a licensed electrician.

Constructed of materials approved by Underwriters Laboratories Inc. for Class 1, Division 2, Group B, C and D.

Specifications

Jacket Maintain Temperature:

at 70°F Ambient: 120°F (49°C)

at 0°F Ambient: 60°F (16°C)

Voltage Rating: 110/120 VAC

Optional Equipment

Thermostat in NEMA 7 housing

Cylinder pad

Regulator cover

Important:

These jackets are NOT designed to heat up cylinders that have been stored in cold or sub-freezing temperatures. Cold cylinders should be brought indoors to warmup BEFORE the cylinder jacket is used.

Under certain circumstances, when the ambient air is cold and wind chill factor is high – high heat losses will be experienced and an insulated top cover may be required to maintain published temperatures.

Hood shown is optional – please inquire.

Model Number	Cylinder Size	Dimensions	Electrical
Q5AD2G120P	44	12" x 51" (29 cm x 130 cm)	14' of internal wire, 8 watts/ft. at 50°F, 9.3 watts/ft. @ 32°F 11 watts/ft. at 0°F (154W, .78A)
Q5ALD2G120P	30AL	11" x 47" (27 cm x 119 cm)	12' of internal wire, 8 watts/ft. at 50°F, 9.3 watts/ft. @ 32°F 11 watts/ft. at 0°F (132W, 1.1A)
Q5BLD2G120P	16AL	11" x 33" (27 cm x 84 cm)	10' of internal wire, 8 watts/ft. at 50°F, 9.3 watts/ft. @ 32°F 11 watts/ft. at 0°F (110W, .92A)
Q5CLD2G120P	7AL	11" x 15" (27 cm x 38 cm)	8' of internal wire, 8 watts/ft. at 50°F, 9.3 watts/ft. @ 32°F 11 watts/ft. at 0°F (88W, .73A)
Q5KD2G120P	49	12" x 55" (30 cm x 140 cm)	16' of internal wire, 8 watts/ft. at 50°F, 9.3 watts/ft. @ 32°F 11 watts/ft. at 0°F (176W, 1.47A)
Q5XLD2G120P	108	17" x 45" (43 cm x 114 cm)	19' of internal wire, 8 watts/ft. at 50°F, 9.3 watts/ft. @ 32°F 11 watts/ft. at 0°F (209W, 1.74A)

Other sizes, temperatures and voltage ratings are available – please inquire.