



Safety cabinets certified  
for the storage of  
GAS CYLINDERS

# Standard EN14470-2



The European harmonization with regard to the storage of chemicals and of gas cylinders has led to the evolution of the storage regulation of compressed gas cylinders. That's why the new European standard EN14470-2 replaces standard DIN 12925-2.

## WHAT DOES THE STANDARD SAY?

### FIRE RESISTANCE TEST

The introduction of standard EN 14470-2 increases the safety level all over Europe.

This standard prescribes that a cabinet for storing gas cylinders in a building must be fire-resistant.

The cabinet must be conceived and manufactured so that in case of fire its contents do not contribute to increase the risks or to spread fire for at least 15 minutes.

The cabinet is conceived so as to ventilate the internal part in case of reduced gas leakages.

### CLASSIFICATION

A safety cabinet for gas cylinders must be classified according to one of the following Types : G15, G30, G60 or G90 minutes.

It is the time for a temperature rise  $> 50K$  (Temperature taken near the tightening plate of the gas cylinder valve).

The flammability class leaves a sufficient time to the staff to leave the area and to firefighters to enter it before the compressed gas cylinders become unstable.

### FIRE RESISTANCE

The fire resistance of the compressed gas cylinder storage cabinet must be established through a type test.

This type test is carried out by heating the cabinet in an oven according to the time-temperature curve and by measuring the temperature increase on an empty gas cylinder surface located inside the cabinet.

The temperature increase on the tightening plate surface of the cylinder valve must not exceed 50 K.

### CERTIFICATION

Each type of cabinet and each model must pass a fire test during which it will be tested. If a gap is detected in the measures above the tolerance limits set by the standard, the cabinet model must be tested again.

**This test must be carried out by an independent approved body.**

When the result of this test is obtained, a conformity certificate to standard EN14470-2 will be delivered and supplied with each cabinet model.



CHEMISAFE puts at your disposal all the certification documents of its cabinets

## MANUFACTURING

### VENTILATION

The cabinets must be equipped with some air inlet and outlet openings allowing connecting a drainage system.

- 1) If some inflammable gases that can maintain a fire are used, the cabinet air volume change will be of at least 10 times per hour.
- 2) If some toxic gases are used, the cabinet air volume change will be of at least 120 times per hour.

The differential pressure must not exceed 150Pa.

The ventilation system must keep a pressure inside the cabinet lower than the surrounding atmosphere.

### HOW TO HOLD THE GAS CYLINDER

A suitable system must be installed inside the cabinet, to prevent the gas cylinder from tilting.

### COMPRESSED GAS CYLINDER INSERTION AND WITHDRAWAL

The cabinet must be manufactured to allow inserting and withdrawing the cylinders with the utmost safety and with the minimum manual effort.

CHEMISAFE provides for an access ramp on all its models.

# Safety storage cabinets for gas cylinders



FIRE-RESISTANT  
**CERTIFIED**  
60 MINUTES (G60)



B120G60

## GAS SUPPLY LINE INSTALLATION

The number of supply line passages through the cabinet wall or roof must be reduced to the minimum necessary with a maximum of three for each cylinder.

The unused holes must be closed.

We recommend making the three holes with a diameter of 10 mm each.

## MARKING

A label must be installed on the front part of the cabinet and it must be readable indicating: the fire resistance class, that the doors must be kept closed, a safety pictogram must signal the presence of compressed gas cylinders, the manufacturer's brand, the model number, the manufacturing year and the serial number.

## HOW DID THE FORMER STANDARD DIN 12925-2 CHANGE?

Due to the modifications on the gas cylinder safety cabinet tests, the former standard DIN12925-2 does not correspond any longer to the higher needs of standard NF EN 14470-2.

**After the official issue of standard NF EN 14470-2, standard DIN 12925-2 has been officially replaced starting from December 2006.**

## WHAT DOES THIS MEAN FOR THE USER?

- 1) A use complying with the regulation
- 2) A certification documentation for each safety cabinet bought
- 3) A maximum safety for the users since in case of fire the staff can leave the building without any danger and the assistance and the firefighters can intervene to reach the cylinder storage place before any more serious fire breaks out because of gas combustion.



# Series FIRE BOMB

Certified according to EN14470-2



FIRE-RESISTANT  
**CERTIFIED**  
30 MINUTES (G30)  
60 MINUTES (G60)



B60G30



B120G30



## TECHNICAL FEATURES

- Completely made of an electrogalvanized steel plate with a thickness from 1 to 2 mm, cold bent
- External finishing made of acidproof epoxy resin and passage through a thermal tunnel at 200 °C
- Cabinet isolation through some high density rock wool panels and some calcium sulphate panels (DIN 4102)
- Internal finishing with melamine panels highly resistant to chemical and aggressive vapours
- Structure allowing replacing spare parts if necessary
- Automatic door closing when the ambient temperature exceeds 50 °C
- 30 mm thermo-expanding isolation seals that in case of temperature rise ensure a perfect cabinet sealing
- Air inlet and outlet with certified fire dampers closing ducts when the temperature exceeds 70 °C according to standard DIN 4102-6
- Prearrangement for ventilation through a Ø 100 mm flange for an external connection (see the chapter on ventilation)
- Closing system allowing keeping the door open in any position
- Spark resistant hinge ensuring a perfect door solidity
- Cabinet equipped with earthing
- Leveling jacks
- Gas pipe passage openings with a diameter of 12 mm, located in the middle and on the upper part of the cabinet
- Door key lock
- Front side ramp made of galvanized steel to facilitate loading and manipulations
- 1 galvanized steel shelf for small gas cylinders
- Gas cylinder supports made of electrogalvanized steel delivered with a fixing chain
- ISO 3864: pictogram signalling
- Certified as fire resistant for **30 minutes**, according to standard **EN14470-2 BV (Bureau Veritas)**

## SERIES FIRE BOMB

CODE	DESCRIPTION	EXTERNAL DIMENSIONS (WxDxH) mm	INTERNAL DIMENSIONS (WxDxH) mm	INTERNAL EQUIPMENT	STORAGE CAPACITY*	Weight (Kg)
B60G30	Cabinet series FIRE BOMB G30 with 1 door	595x600x2050	435x380x1760	1 <b>galvanized</b> steel shelf for small gas cylinders	1 gas cylinder Ø 26 cm or 2 cylinders Ø 21/23 cm	270
B120G30	Cabinet series FIRE BOMB G30 with 2 doors	1200x600x2050	1050x400x1760	1 <b>galvanized</b> steel shelf for small gas cylinders	3 gas cylinders Ø 26 cm or 4 cylinders Ø 21/23 cm	445
B60G60	Cabinet series FIRE BOMB G60 with 1 door	700x600x2050	470x380x1740	1 <b>galvanized</b> steel shelf for small gas cylinders	1 gas cylinder Ø 26 cm or 2 cylinders Ø 21/23 cm	300
B120G60	Cabinet series FIRE BOMB G60 with 2 doors	1400x600x2050	470+470x340x1740	2 <b>galvanized</b> steel shelves for small gas cylinders	3 gas cylinders Ø 26 cm or 4 cylinders Ø 21/23 cm	600

## INTERNAL EQUIPMENT (optional)

CODE	DESCRIPTION	DIMENSIONS (WxDxH) mm	STORAGE CAPACITY
ACCG30	Additional shelf for small gas cylinder	430x330x250	1 small cylinder
RIPB60	Additional shelf for BOMB60		
RIPB120	Additional shelf for BOMB120		
ESTINTORE	External carbon dioxide fire-extinguisher with automatic thermal tripping (62 °C)	Ø 90x280	

## VENTILATION (optional)\*

CODE	DESCRIPTION	DIMENSIONS (WxDxH) mm
DIAM125BP	Fresh air box with filter holding box for high cabinet with 1 or 2 doors - outlet Ø: 125 mm (filter excluded)	290x290x270
CSF100BPAMY23	Fresh air box ATEX with power cable and filter box - outlet diameter 125 mm	350x370x500
RSOL	Activated charcoal filter for organic solvents (to replace at least twice a year)	235x110x15
GFKIT100	External connection kit (1 metre of hose diam 100 mm and 2 pipe clamps)	Ø 100 - W 1000 mm

\*To obtain the complete list of the connection accessories, see the chapter on ventilation of this catalogue and the current price list

## Series BBASIC

Safety cabinets for the internal and external storage of gas cylinders



BBASIC60



BBASIC120

 The cheap solution to store gas cylinders safely



BBASIC60G



BBASIC120G



## TECHNICAL FEATURES

- Completely made of an electrogalvanized steel plate (Skin passat) FE P01 with a thickness of 15/10 mm, cold bent and degreased
- External finishing made of epoxy resin and thermosetting powder and passage through a thermal tunnel at 200 °C
- Grey RAL 7035
- Construction in one piece with jacks to level the cabinet
- Plain swing doors or with polycarbonate windows
- Door opening at 110°
- Safety closing with lock
- Door opening with an angle of 110°
- External hinge made of plastic resistant to corrosion
- Front side hinged ramp made of steel plate to facilitate loading and manipulations
- Bottle fixing chains
- ISO 3864: Pictogram signalling

## SERIES BBASIC

CODE	DESCRIPTION	EXTERNAL DIMENSIONS (WxDxH) mm	INTERNAL DIMENSIONS (WxDxH) mm	INTERNAL EQUIPMENT	STORAGE CAPACITY	Weight (Kg)
BBASIC60	Cabinet series BBASIC with 1 plain door	600x600x1950	595x540x1864	1 hinged ramp, chains	From 1 to 2 gas cylinders	80
BBASIC60G	Cabinet series BBASIC with 1 door with window	600x600x1950	595x540x1864	1 hinged ramp, chains	From 1 to 2 gas cylinders	80
BBASIC120	Cabinet series BBASIC with 2 plain doors	1200x600x1950	1130x540x1864	1 hinged ramp, chains	From 3 to 4 gas cylinders	130
BBASIC120G	Cabinet series BBASIC with 2 doors with window	1200x600x1950	1130x540x1864	1 hinged ramp, chains	From 3 to 4 gas cylinders	130

## Series PANDESA®

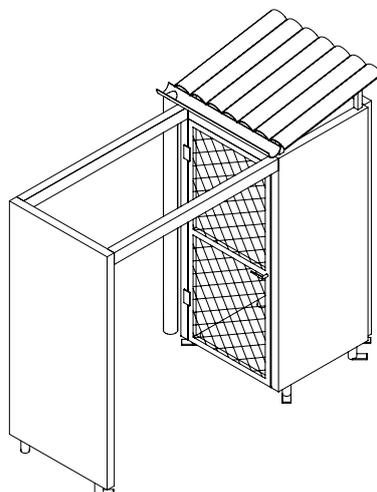
Certified box for the external storage of compressed gas cylinders



The logical, cheap and modular solution for storing your gas cylinders externally

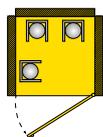


PAN01



### DOOR PROTECTION KIT

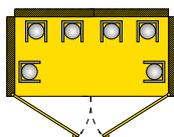
CODE	DESCRIPTION
PAN01	1 door
PAN02	2 doors



**PAN01 - LED3**

For 3 gas cylinders

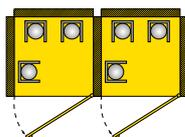
W 960 x D 880 x H 2400 mm  
Weight: 262 Kg



**PAN02 - LED6**

For 6 gas cylinders

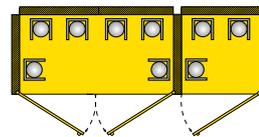
W 1760 x D 880 x H 2400 mm  
Weight: 377 Kg



**PAN03 - LED3+3**

For 3+3 gas cylinders

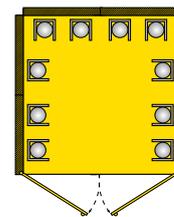
W 1840 x D 880 x H 2400 mm  
Weight: 448 Kg



**PAN04 - LED6+3**

For 6+3 gas cylinders

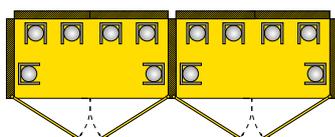
W 2640 x D 880 x H 2400 mm  
Weight: 568 Kg



**PAN05 - LED10**

For 10 gas cylinders

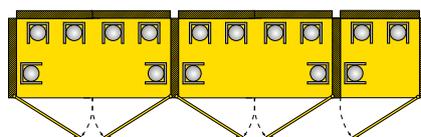
W 1760 x D 1680 x H 2400 mm  
Weight: 550 Kg



**PAN06 - LED6+6**

For 6+6 gas cylinders

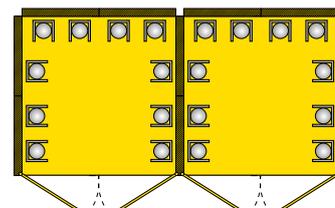
W 3440 x D 880 x H 2400 mm  
Weight: 683 Kg



**PAN07 - LED6+6+3**

For 6+6+3 gas cylinders

W 4320 x D 880 x H 2400 mm  
Weight: 875 Kg



**PAN08 - LED10+10**

For 10+10 gas cylinders

W 3440 x D 1680 x H 2400 mm  
Weight: 909 Kg



### TECHNICAL FEATURES

- Manufacturing with steel panels welded to some enclosing side members to prevent the structure deflections
- Box with adjustable feet for fastening to the ground
- Possibility of filling the above-mentioned panels with sand or concrete and then of fixing them
- Galvanization treatment on all components
- Polyurethane resin paint
- Modular roof made of corrugated cardboard fixed on a supporting basis made of painted steel
- PVC gutter to drain rainwater
- Doors with anti-intrusion grid equipped with a safety lock
- Equipped with continuous earthing for each piece (FARADAY CAGE)
- Extensible structure thanks to modules (the picture shows the model for 3 cylinders, see the drawings below)
- Openings to fix the modules
- Possibility of separating fuel and combustion agent
- No building permit is required
- Authorization from the Ministry of the interior  
**Certificate No. 3804/30/91**

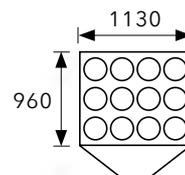
# BOX FOR GAS CYLINDERS



PBOX912



Protect your equipment against the unauthorized people



**PBOX912**  
**Box from 9 to 12 places**  
W 1130 x D 960 x H 2100 mm  
Weight: 175 Kg

RAMP INCLUDED



## TECHNICAL FEATURES

- Swing door with security lock
- Roof made of galvanized steel
- Internal basis made of non-slip steel
- Earthing
- Internal chain and spring hook to fix the cylinders
- Already prepared to assemble modules
- Safety labelling included



Authorized dealer: