

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?

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

➔ 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.

➤ MANUFACTURING

➔ VENTILATION

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

- 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
- 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.



Series FIRE BOMB

Certified according to EN14470-2



**FIRE-RESISTANT
CERTIFIED**
30 minutes (TYPE 30)
60 minutes (TYPE 60)

NEW!

Certification EN14470-2



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 with 1 door Type G30	595x600x2050	493x443x1780	1 galvanized steel shelf for small gas cylinders	1 gas cylinder Ø 26 cm or 2 cylinders Ø 21/23 cm	250
B120G30	Cabinet series FIRE BOMB with 2 doors Type G30	1200x600x2050	1092x443x1780	1 galvanized steel shelf for small gas cylinders	3 gas cylinders Ø 26 cm or 4 cylinders Ø 21/23 cm	420
B60G60	Cabinet series FIRE BOMB with 1 door Type G60	700x600x2050	500x365x1780	1 galvanized steel shelf for small gas cylinders	1 gas cylinder Ø 26 cm or 2 cylinders Ø 21/23 cm	275
B120G60	Cabinet series FIRE BOMB with 2 doors Type G60	1400x600x2050	500+500x365x1780	1 galvanized steel shelf for small gas cylinders	3 gas cylinders Ø 26 cm or 4 cylinders Ø 21/23 cm	580

→ 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
CSF100BPAMY11	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