

Spare air cylinder 6.8L



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A、 *Standard*

SOLAS 1974, as amended

B、 *Technical parameter*

- Capacity: 6.8L
- Material: Carbon fiber
- Working pressure: 30MPa
- Hydraulic test pressure: 50MPa
- Burst pressure: 117MPa
- Design of wall thickness: 4mm
- Outside diameter: 157mm
- Height: 520mm(Valve height 580mm)
- Weight: 3.8kg
- Storage capacity: 2040L
- Thread size of bottle mouth: M18x1.5
- Contour size: 156x525mm
- Detection cycle: 3 years / cycle
- Service life: 15 years

C、 *Instruction*

Carbon fiber composite gas cylinder is a new material gas cylinder developed in recent years. Its characteristic is that compared with steel cylinders, it has the advantages of light weight, long service life, good corrosion resistance, good safety and long service life. It can be used in self powered positive pressure air respirator, which can greatly reduce the self weight of the fittings. Therefore, in the actual use process can directly reduce the wear and tear of the wear and tear users. It is



especially suitable for the fire fighting industry, which can improve the fighting capacity of the firefighters.

Aluminum tank wrapped with carbon fiber gas bottle (called cylinder for short below) cylinder filling, transportation, storage and usage should comply with 《the rules of the gas cylinder safety》 ; For positive pressure fire air breathing apparatus, shall comply with the GA124-2004 《provision of positive pressure type fire air breathing apparatus》 . Cylinder design life is 15 years.

D、 Structure and manufacture

Carbon fiber composite gas cylinder is made of high strength fibers, such as carbon fiber and glass fiber, for the external use of aluminum alloy internal bile.

1. Aluminum alloy inner bladder

The aluminum alloy inner gallbladder of carbon fiber composite gas cylinder is manufactured according to the standard of the United States Department of transportation and the aluminum alloy internal bladder is 100% inspected. Inspection items: wall thickness, straightness, coaxiality, roundness, surface finish and hardness test.

2. Winding layer

The filament winding of carbon fiber composite material is divided into two kinds: full winding and partial winding.

Carbon fiber composite gas cylinder is a full wound cylinder, its main winding layer is filament carbon fiber. The purpose is to enhance the impact resistance and wear resistance of the cylinder.

E、 Pay attention to matters

- Gas filling pressure of the cylinder is prohibited more than the

cylinder label work pressure (reference temperature 20°C).

- Keep bottle screw and cylinder internal dry, grease contamination on the cylinder valves shall be strictly prohibited.
- Filling or partial filling of any gas on the label not specified.
- It is prohibited to remove, fuzzy or change the cylinder manufacturer's label or logo.
- It is forbidden to completely deflate the gas of the cylinder (remain 0.1 MPa), unless unload the valve.
- It is prohibited that to fill the gas to the cylinder has exceed the review cycle, gas cylinder test cycle is 5 years, inspection shall be performed by detection enterprise with the detection qualification. In the use process of the gas cylinder, if find any serious corrosion and damage or have doubts about its security, should be tested in advance. Cylinders that is subjected to collision, fire or other damage should stop using, and should be detected in accordance with relevant standards, norms.
- Artificial heating of cylinder is forbidden.
- If find breakage, damage or obvious scratch, should not be filled.
- Filling air cylinder is banned.

F、APPROVE: CCS MED EC SOLAS



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Professional fire fighting & life saving equipment manufacturer