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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 34528-2017

Regulation for the filling of cylinder bundles

气瓶集束装置充装规定

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. Please note that some of this document may be patentable. The release of this document The agency does not assume responsibility for identifying these patents. This standard by the National Gas Cylinder Standardization Technical Committee (SAC/TC31) and focal point. This standard was drafted by Hangzhou New Century Mixed Gas Co., Ltd., Beijing Helium North Gas Industry Co., Ltd., Beijing Praxair Practical Gas Co., Ltd., China Industrial Gas Industry Association. The main drafters of this standard. Wu Yue Sun, Zhao Junxiu, Hunchun dry, Song Qi, Shen Jianlin, Zhang Jinbo. Cylinder bunching device filling provisions

1 Scope

China's national regulation for filling cylinder bundles. It specifies the basic principles and safety requirements, and it applies to bundles with a total water capacity of not more than 3000 litres, holding compressed gas, high pressure liquefied gas and dissolved gas, used at ambient temperatures from minus 40 to 60 degrees C. A cylinder bundle is a frame holding a dozen or so cylinders manifolded together and handled as one unit by crane or forklift. It exists because a user consuming gas steadily does not want to change single cylinders several times a day, and because a bundle is safer to move mechanically than loose cylinders are to move by hand. What it changes for the filler is that the cylinders are no longer filled individually: gas enters through a common manifold, and a fault in one cylinder or one valve is not isolated from the rest. The regulation therefore concentrates on the manifold, the isolation of individual cylinders, and the checks that must be made before a bundle is treated as a single vessel.

This standard specifies the basic principles and safety requirements of cylinder cluster device filling. This standard applies to the use of ambient temperature is -40 °C ~ 60 °C, the total water volume is less than or equal to 3000L, the medium is compressed gas, high Filling liquefied gas and gas cylinder bundling device (gas-gas mixture). This standard does not apply to the medium is liquid - liquid gas mixture, the toxic degree of toxic or toxic gas cluster device filling, it does not apply In the filling of high-pressure liquefied gas

(flammable), fixed in the car using the cluster device filling.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 7144 cylinder color logo

GB/T 13005 gas bottle terminology

GB/T 14193 liquefied gas cylinder filling provisions

GB/T 14194 permanent gas cylinder filling requirements

GB/T 15383 cylinder valve outlet connection type and size

GB/T 28054 steel seamless cylinder cluster device

3 Terms and definitions

GB/T 13005 and GB/T 28054 defined terms and definitions apply to this document.

4 Cylinder bundle device requirements

4.1 Cylinders within the cluster shall comply with the relevant standards and have the same nominal working pressure, diameter, volume and same test Period, the nominal working pressure is not more than 30MPa, the nominal water volume of a single cylinder should not exceed 150L, the total water volume of the cluster device cylinders Less than or equal to 3000L. Cluster device for filling oxygen, the nominal working pressure should not exceed 20MPa.

4.2 Filling cylinder cluster device type and model, technical requirements, test methods and requirements, inspection rules, marking requirements, coating requirements, Storage and safe use should be consistent with GB/T 28054 and related standards and requirements.

5 cylinder cluster device before filling inspection and handling

5.1 Before filling the cylinder cluster device should be responsible for the people, by rack for inspection. Check the content and requirements should include at least.

- a) The nameplate on the cylinder cluster shall be complete and clear;
- b) Cylinders should be produced by units with "special equipment manufacturing license";
- c) imported gas cylinders shall be approved by special equipment safety supervision and management department;