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

GB/T 47258-2026

**Gas cylinders - Valve protection caps and guards - Design,
construction and tests**

气瓶 阀门防护帽和防护罩 设计、制造与试验

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is modified to adopt ISO 11117:2019 "Design, manufacture and testing of protective caps and covers for gas cylinder valves".

Compared with ISO 11117:2019, this document has undergone the following structural adjustments.

---Compared to ISO 11117:2019, the unlabelled sections in Chapters 1, 4, 6, 7.1, 7.2, 7.5,

7.6 and 8 of this document are different.

The title bar has been numbered.

The technical differences between this document and ISO 11117:2019, and the reasons therefor, are as follows.

Compared to ISO 11117:2019, this document adds two types of gas cylinders that are not applicable. liquefied petroleum gas cylinders and cryogenic insulated gas cylinders.

Type (see 1.3);

---ISO 10286 (see Chapter 3) has been replaced with the normatively referenced GB/T 13005 to adapt to my country's technical conditions and add [further details needed].

Operability;

---ISO 10297 (see 4.2.5) has been replaced with the normatively referenced GB/T 15382 to adapt to my country's technical conditions and increase operability.

Actual nature;

---The international standard ISO 17871 (see 4.1.5, 7.7.2) that quick-release valves should conform to in ISO 11117:2019 has been removed to accommodate...

Given my country's technological capabilities, this increases operability;

---In accordance with TSG23, the applicable scope requirements for protective helmets have been added (see 4.1.9) to adapt to my country's technical conditions;

---Added recommendations for thread sizes conforming to Tables 1-4 (see 4.2.8) for the protective cover thread, increasing operability;

---The requirements for the connection points of valve protection devices to valves have been increased (see 4.2.9), improving operability;

---The commonly used gas cylinder neck thread PG80 in my country has been added (see 4.3.2, Figure 4, Table 1 and Table 2) to adapt to my country's technical conditions.

Add components to increase operability;

---Clearly define the material requirements for protective helmets and shields (see 6.5) to adapt to my country's technical conditions and increase operability;

---Regarding metrological requirements for inspection and testing instruments, the phrase "calibrated instruments" in ISO 11117:2019 is revised to "verified or calibrated instruments".

"Substandard instruments" (see 7.1.1) are required to adapt to my country's technical conditions and increase operability;

---For the safety performance evaluation of valve protection devices after valve design

changes, a provision has been added allowing for verification using drop tests (see...).

7.7.8, 7.7.9) increase operability;

---Change the requirement in ISO 11117:2019 that "it is recommended" the cylinder owner should hold the test report for the valve protection device to "should" hold the valve protection device.

Test reports on protective devices (see 8.1.3) are required to adapt to my country's technical conditions and improve the safety of gas cylinders;

---The actual dimensional requirements of c in Figure 3 should be indicated in the test report (see Chapter 9) to increase operability.

The following editorial changes have been made to this document.

---Some clauses have been modified by replacing the requirements in parentheses in the original text of ISO 11117:2019 with the requirements in the clauses themselves, i.e., the parentheses have been deleted (see...).

(1.2, 4.1.3, 4.1.5, 7.2, 7.5, 7.6, 7.7.2, 7.7.6, 7.7.8, and 7.7.9) to improve document organization and readability;

In the original ISO 11117:2019 document, "protective caps and covers" and "valve protection devices" often appear interchangeably. To facilitate understanding...

Solution. Note 1.1 adds an additional explanation of the relationship between "valve protective caps and covers" and "valve protective devices";

---To ensure consistency in the text, the phrase "protective cap or shield" in Chapter 6 (except 6.5), 7.1.4, and 7.7.5 has been changed to "Valve protection device";

---Note 1 to Chapter 1 of ISO 11117:2019 has been removed. the transportation methods for small-volume gas cylinders are not a topic to be considered in this document;

---Referring to GB/T 3375 "Welding Terminology", the translation of "welding or brazing" has been changed to "welding" (see...).

---Notes have been added to sections 3.1 and 3.2, providing additional information on alternative names for protective caps and shields;

---The term "permitted mass" in ISO 11117:2019 (see 3.4) is translated as "maximum protective mass".

"Quantity" is more in line with the description in the definition;

---Subtitles in Figures 1 and 3 have been removed;

---Note 4 in Figure 2 has been deleted; this figure has also been removed from ISO 10297:2024.

---Change the pitch symbol to the uppercase letter P (see Figure 4, Table 1, Table 3, Figure 5);

---Change the translation of the header in the first column of Tables 1 through 4 to "thread code";

---The symbols for major and minor diameters in Tables 3 and 4 of ISO 11117:2019 have been changed;

---The symbols for internal and external thread dimensions in Figure 5 of ISO 11117:2019 have been changed;

---The statement in ISO 11117:2019, "Experience shows that testing at -20°C and room temperature can ensure the safety of valve protection devices," is relevant.

The phrase "fullness" should be changed to a note (see 6.1). This sentence is not a requirement and is not suitable for inclusion in the clause.

---The translation of "laboratory" has been changed to "experimental unit" (see 7.2, Chapter 9);

---The requirement for post-test specimen disposal and marking in section 7.3 of ISO 11117:2019 has been removed. This requirement is consistent with that in section 7.1.4.

repeat;

---To avoid conflict with section 1.4 of this document, paragraph 1 of section 7.6 in ISO 11117:2019 has been deleted;

---The description of neckband size in section 8.1.1a)2) has been revised to make the statement more concise and clear;

---ISO 11117:2019, Chapter 9, Section e) only specifies the form and dimensions of threaded connections, but valve protection devices may also be made in other ways.

Regarding the connection, this document corrects the description of this column.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed and is under the jurisdiction of the National Technical Committee on Standardization of Gas Cylinders (SAC/TC31).

1 Scope

1.1

This document specifies the requirements for protective caps and covers for valves of liquefied gas, dissolved gas, or compressed gas cylinders.