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

GB 18985-2021

Amount of supply gases for divers

潜水员供气量

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB 18985-2003 "Diver Air Supply". Compared with GB 18985-2003, except for editorial changes, the main technical The content of the surgery changes as follows:

- Added the terms and definitions of "Bangsi Diving" (see 3.2);
- Deleted the terms and definitions of "breathing mixture" and "conventional diving" (see 3.3 in the.2003 edition);
- Deleted the calculation of the air supply flow rate of the ejector regenerative helium-oxygen diving equipment (see 4.4 in the.2003 edition);
- Deleted the content of the amount of gas required to maintain a certain remaining pressure of the gas supply in the gas storage container (see 4.5.4 in the.2003 edition);
- Amend "air routine diving" to "air diving" (see 5.1,

4.5 in the.2003 edition);

---Added the calculation of the amount of oxygen required for air diving therapy (see 5.1.2.2);

--- Amend "Helium and Oxygen Routine Diving" to "Mixed Gas Diving" (see 5.2, 4.6 of the.2003 edition);

---Modify the calculation of the mixed gas consumption (see 5.2.1,

1 Scope

GB 18985-2021 is the Chinese national standard on amount of supply gases for divers, in the field of services and company organization. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 30 April 2021 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 November 2021. Classification: ICS 03.220.40, CCS R53. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the gas supply flow requirements for diving operations and the gas reserve requirements for diving operations. This standard applies to air diving and mixed air diving conducted by divers using ventilated, surface air supply and self-contained diving equipment. Water, Bangsi diving and saturation diving operations.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article Pieces. For undated reference documents, the latest version (including all amendments) is applicable to this document.

GB/T 17871 Nitrogen and oxygen saturation or air saturation-air circuit diving decompression procedure

GB 26123 Air diving safety requirements

GB 28396 Safety requirements for mixed gas diving

3 Terms and definitions

The following terms and definitions defined in GB 26123 and GB 28396 apply to this document.

3.1 Meet the minimum breathing gas flow required for underwater operations by divers and the minimum breathing gas volume required to complete diving operations.

3.2 Bouncediving Mixed gas diving using a closed diving bell-deck decompression chamber system.

4 Air supply flow requirements for diving operations

4.1 Air flow of ventilated diving equipment The calculation method of the minimum air supply flow required when using ventilated equipment for underwater operations is according to formula (1). $Q_{v1} = q_1 \times d_0 \times 1.05 \div (1)$ Where. Q_{v1}

---The minimum air flow required for divers using ventilated diving equipment to perform operations underwater, in liters per minute (L/min); q_1

---The ventilation volume of a diver using a ventilated diving gear during a given labor intensity operation under normal pressure, in liters per minute (L/min) (light labor intensity $q_1=65$; medium labor intensity $q_1=100$; heavy labor intensity $q_1=190$); d

---Diving operation water depth, in meters (m); d_0

--- the depth of water when the hydrostatic pressure increases by 0.10MPa, in meters (m), $d_0=10m$.

Note. Divers are considered to be engaged in light labor-intensive operations during the decompression process during the dive or underwater phase.