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

GB/T 18916.8-2025

Replacing GB/T 18916.8-2017

Norm of water intake for industry - Part 8: Synthetic ammonia

工业用水定额 第8部分：合成氨

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting. This document is Part 8 of GB/T 18916 Industrial Water Quota. GB/T 18916 has been published in the following parts.

- 1. Thermal power generation;
- 2. Iron and steel integrated enterprises;
- 3. Petroleum refining;
- 4. Textile dyeing and finishing products;
- 5. Paper products;
- 8. Synthetic ammonia;
- 9. Monosodium glutamate (MSG);
- 10. Chemical pharmaceutical products;
- 11. Coal preparation;
- 12. Aluminium oxide;
- 13. Ethylene and propylene;
- 14. Wool textile products;

1 Scope

GB/T 18916.8-2025 is the Chinese national standard on norm of water intake for industry -

part 8: synthetic ammonia, in the field of environment and health protection, safety. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 25 April 2025 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 August 2025. Classification: ICS 13.060.25, CCS P41. 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 document specifies the calculation method, water quota and management requirements for synthetic ammonia water quota. This document applies to water use management of synthetic ammonia production enterprises using coal and natural gas as raw materials.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 5751 China Coal Classification

GB/T 12452 General rules for water balance test

GB/T 18820 General rules for the compilation of industrial water quotas

GB/T 21534 Terminology for water conservation

GB/T 24789 General rules for the allocation and management of water metering instruments in water-using units

3 Terms and definitions

The terms and definitions defined in GB/T 5751, GB/T 18820 and GB/T 21534 apply to this document.

4.1 Calculation scope

4.1.1 The calculation scope of water sources includes surface water (measured by water supply from water treatment plants), groundwater, urban water supply projects, and water from the market. Other purchased water or water products (such as steam, hot water, etc.).

4.1.2 The calculation scope of water withdrawal includes the main production (storage and processing of raw materials, raw gas preparation, gas purification, gas compression, ammonia synthesis etc.), auxiliary production (including machine repair, boiler, water treatment, air separation station, analysis and testing, storage, transportation, etc.) and ancillary production (including office, green chemical, factory canteen, bathroom and toilet, etc.).

4.2 Calculation formula The water consumption per ton of synthetic ammonia is calculated according to formula (1). $V_{ui} = V_i / Q$ Where. V_{ui}

---water intake per ton of synthetic ammonia, in cubic meters per ton (m^3/t); V_i

---the total amount of water taken in the production process during the statistical period, in cubic meters (m^3); Q

--- Output of synthetic ammonia products during the statistical period, in tons (t).