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

GB/T 18916.31-2017

**Norm of water intake - Part 31 :Sintering and pelletizing for iron
and steel industry**

取水定额 第31部分：钢铁行业烧结/球团

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Foreword

The following parts of GB/T 18916 Norm of Water Intake have already been issued or are planned to be issued.

- Part 1. Fossil Fired Power Production;
- Part 2. Iron and Steel Complex;
- Part 3. Petroleum Refining;
- Part 4. Dyeing and Finishing of Cotton Production;
- Part 5. Pulp, Paper and Paper Board Production;
- Part 6. Brewing Industry;
- Part 7. Alcohol Production;
- Part 8. Ammonia Synthesis;
- Part 9. Monosodium L-glutamate Production;
- Part 10. Pharmaceutical Products;
- Part 11. Coal Cleaning;
- Part 12. Alumina Production;
- Part 13. Ethylene Production;

1 Scope

GB/T 18916.31-2017 is the Chinese national standard on norm of water intake - part 31 :sintering and pelletizing for iron and steel industry, 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 1 November 2017 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 May 2018. 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 Part of GB/T 18916 specifies the terms, definitions, calculation methods and norm of water intake of sintering and pelletizing enterprises in the iron and steel industry. This Part is applicable to water intake management of the existing, newly constructed, renovated and expanded independent sintering and pelletizing enterprises in the iron and steel industry. The management of water intake of sintering and pelletizing procedure of iron and steel complexes shall also take this Part as a reference.

2 Normative References

The following documents are indispensable to the application of this Standard. In terms of references with a specified date, only versions with a specified date are applicable to this Standard. The latest version (including all the modifications) of references without a specified date is also applicable to this Standard.

GB/T 12452 The General Principles of Water Balance Test in Enterprises

GB/T 18820 General Principles of Stipulation of Water Intake Norm for Industrial Product

GB/T 21534 Industrial Water Usage and Conservation - Terminology

GB 24789 General Provisions on Equipping and Managing of the Measuring Instrument of Water in Organization of Water Using

GB 50408 Code for Design of Sintering Plant

GB 50491 Code for Design of Iron Pellet Engineering

3 Terms and Definitions

Terms and definitions defined in GB/T 18820, GB/T 21534, GB 50408 and GB 50491 are applicable to this document.

4.1 General Stipulations

4.1.1 Scope of water intake The range of water intake refers to the amount of water that

enterprises extract from various regular water resources, including surface water (calculated by the water supplied by water purification plants), groundwater, city and town water supply engineering, and other water or water products (such as vapor, hot water and geothermal water, etc.) that enterprises purchase from the market.

4.1.2 Range of water intake supply The range of sintering water intake supply includes primary production (including fuel crushing, flux crushing, ingredients, mixture, pelletizing, sintering, cooling, screening, and storage and transportation of finished products), auxiliary production (including water-circulating station, air-compressing station and sewage treatment station, etc.) and subsidiary production (including office, afforestation, factory canteen, bathroom and washroom, etc.). The range of pelletizing water intake supply includes primary production (reception and storage of concentrates, concentrate drying, pulverized coal preparation, ingredients, mixture, pelletizing, drying, pre-heating, roasting, cooling, and storage and transportation of finished products), auxiliary production (water-circulating station and air-compressing station, etc.) and subsidiary production (including office, afforestation, factory canteen, bathroom and washroom, etc.). The norm of water intake shall be respectively formulated in terms of sintering waster heat power generation, sintering flue gas desulfurization and pellet flue gas desulfurization.

4.1.3 Measurement of water intake Water intake shall be measured in accordance with enterprises' Level-1 measurement scale.

4.2 Water Intake of Finished Ore (per ton) Water intake of finished ore (per ton) shall be calculated in accordance with Formula (1). Where. V_{ui}

---Water intake of finished ore (per ton), expressed in (m³/t); V_i