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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 33018-2025

Replacing GB/T 33018.1-2016

Energy-saving technical specification for carbon products enterprises

炭素企业节能技术规范

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Standardization Administration of the PRC

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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 supersedes GB/T 33018.1-2016 "Technical Specifications for Energy Conservation in Carbon Enterprises Part

1.Impregnation" and GB/T 33018.2- 2016 "Technical Specification for Energy Conservation in Carbon Enterprises Part

2.Calcination Kilns" and GB/T 33018.3-2016 "Technical Specification for Energy Conservation in Carbon Enterprises Part

3.Calcination Kilns" Part. Machining. This document is based on GB/T 33018.1-2016, and integrates GB/T 33018.2-2016 and GB/T 33018.3-2016. Content. Compared with documents such as GB/T 33018.1-2016, apart from structural adjustments and editorial changes, the main technical changes are as follows:

a) The scope has been changed, adding molding and graphitization processes (see Chapter 1, Chapter 1 of the.2016 edition);

b) The term and definition of "immersion tank" have been removed, and the term and definition of "molding process" have been added (see Chapter 3, Chapter 3 of the.2016 edition);

c) The principle of impregnation has been removed (see Chapter 4 in the.2016 edition);

d) Basic requirements have been added, and common technical requirements for each process have been integrated (see Chapter 4, Chapter 5 of the.2016 edition);

e) Added energy-saving technical measures for major processes, integrating energy-saving technical requirements, energy-saving measures, energy-saving operation, and energy-saving maintenance for each process. (See Chapter 5, Chapter 6 in the.2016 edition);

f) The technical requirements for energy management have been revised (see Chapter 6,

6.3 of the.2016 edition);

g) Increased testing and control requirements (see 7.2, 7.4~7.9);

h) Safety and environmental protection requirements have been removed (see Chapter 8 of the.2016 edition);

1 Scope

GB/T 33018-2025 is the Chinese national standard covering energy in a carbon and graphite works - the calcining, mixing, baking and graphitisation, the last of which consumes an enormous amount of electricity, and the heat recovery and process control that reduce it. It replaces GB/T 33018.1-2016. It was issued on 2 December 2025 and has been in force since 1 July 2026, replacing GB/T 33018.1-2016. The document is under the responsibility of the China Iron and Steel Association. This page is published from the official record of the 2025 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

2 Aluminum and aluminum alloy busbars

GB/T 8175 Guidelines for Insulation Design of Equipment and Piping

GB/T 8718 Terminology for Carbon Materials

GB/T 11062 Calculation Methods for Calorific Value, Density, Relative Density and Wobbe Index of Natural Gas

GB/T 13234 Method for Calculating Energy Savings by Energy-Using Units

GB/T 16157 Determination of particulate matter and sampling methods for gaseous pollutants in exhaust gas from stationary sources

GB/T 16618 General Technical Specifications for Thermal Insulation of Industrial Furnaces and Kilns

GB 17167 General Rules for the Configuration and Management of Energy Measuring Instruments in Energy-Using Units

GB/T 18494.1 Converter Transformers - Part

GB 18613 Minimum Energy Efficiency Values and Energy Efficiency Grades for Electric Motors

GB 19153 Minimum Energy Efficiency Values and Energy Efficiency Grades for Positive Displacement Air Compressors

GB 19761 Energy Efficiency Limits and Energy Efficiency Grades for Ventilation Fans

GB 19762 Energy Efficiency Limits and Energy Efficiency Grades for Centrifugal Pumps
GB.20052 Energy Efficiency Limits and Energy Efficiency Grades for Power Transformers

GB 21370 Energy Consumption Limits per Unit Product of Carbon

GB 24500 Energy Efficiency Limits and Energy Efficiency Grades for Industrial Boilers

GB 50126 Construction Specification for Thermal Insulation Engineering of Industrial Equipment and Piping

GB 50187 Standard for General Layout Design of Industrial Enterprises

GB 50211 Code for Construction and Acceptance of Industrial Furnace Masonry

GB 50264 Code for Design of Thermal Insulation Engineering for Industrial Equipment and Piping

GB 50309 Standard for Acceptance of Quality of Industrial Furnace Masonry Engineering

GB 50544 Standard for General Layout Planning and Transportation Design of Nonferrous Metals Industry

GB 50765 Standard for Process Design of Carbon Plants

GB 55020 General Code for Building Water Supply and Drainage and Water Conservation
SY/T 0524 Technical Specification for Thermal Oil Heating Furnace System