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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB 29445-2025

Replacing GB 29444-2012

Norm of energy consumption per unit production of coal mining

煤炭开采单位产品能源消耗限额

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1 Scope

GB 29445-2025 is the Chinese national standard on norm of energy consumption per unit production of coal mining, in the field of energy and heat transfer engineering. 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 1 August 2025 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 August 2026. Classification: ICS 27.010, CCS F01. 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 levels, technical requirements, statistical range, and calculation methods for norm of energy consumption per unit production of coal mining (hereinafter referred to as "energy consumption"). This Document applies to the calculation and assessment of energy consumption per unit production of coal mining enterprises, as well as the energy consumption control of newly established enterprises.

2 Normative References

The provisions in following documents become the essential provisions of this Document through reference in this Document. For the dated documents, only the versions with the dates indicated are applicable to this Document; for the undated documents, only the latest version (including all the amendments) is applicable to this Document.

GB/T 2589 General rules for calculation of the comprehensive energy consumption

GB/T 12723 General principles for establishing allowance of energy consumption per unit throughput

GB/T 28398 Norms of energy consumption statistics for coal enterprises

3 Terms and Definitions

For the purposes of this Document, the terms and definitions given in GB/T 12723 and the following apply.

3.1 Energy consumption per unit production of coal mining The sum of all energy consumed in producing each ton of raw coal during the statistical period, converted according to the prescribed calculation methods and units.

3.2 Energy consumption of coal production The sum of standard coal equivalent of the energy consumption of main production and auxiliary production during the statistical period. [Source: GB/T 28398-2012, 3.6]

3.3 Output of raw coal in underground mine The sum of mining output, tunneling output, and other mine output during the statistical period.

3.4 Output of raw coal in surface mine The sum of coal production during the mining stage, stripping stage, and other surface coal production during the statistical period.

4 Norm Level of Energy Consumption

The norm level of energy consumption per unit production of coal mining are divided into three levels, with Level 1 having the lowest energy consumption. The energy consumption per unit production of coal mining for each level shall meet the requirements in Table 1. Table 1 - Norm of energy consumption per unit production of coal mining

5 Technical Requirements

The norm of energy consumption per unit production of the existing coal mining shall meet the requirements of Level 3 in Table

1.The access value of energy consumption per unit production of the newly built and expanded coal mining shall meet the requirements of Level 2 in Table 1.

6 Statistical Range and Calculation Methods

6.1 Statistical range and principles for converting the energy to standard coal equivalents

6.1.1 Statistical range The energy consumption for coal production includes the sum of the energy consumption for main production and auxiliary production converted to standard coal equivalents within the statistical period; and shall meet the requirements of GB/T 2589.Main production energy consumption includes energy consumption for underground mining (tunneling, mining, ventilation, drainage, gas extraction, transportation, hoisting, etc.) and surface mining (drilling, blasting, loading, transportation, dumping, etc.). Auxiliary

production energy consumption includes energy consumption for mine maintenance, mine lamp charging, production lighting, production water supply, production heating, coal-gangue separation at wellhead, fire extinguishing grouting, laboratory work, mine construction, etc.

6.1.2 Principles for converting the energy to standard coal equivalents The calorific value of all energy sources is calculated in standard coal equivalents. The equivalent calorific value of all energy sources is based on the calorific value actually measured by the enterprise within the statistical period. Where no actual measurement conditions are available, the energy consumption shall conform to the provisions of GB/T 2589 or adopt the reference coefficients converting various energy sources to standard coal equivalents in Appendix A.

6.2 Calculation methods

6.2.1 Calculation method for energy consumption per unit production in underground coal mining enterprises The energy consumption per unit production in underground coal mining enterprises shall be calculated according to Formula (1). Where. ejg - energy consumption per unit production of underground coal mining, in kgce/t; Ejg - energy consumption of coal production, in kgce; k1 - conversion factor for mining conditions and processes, take value as per Appendix B; k2 - conversion factor for transportation distance, take value as per Appendix B; k3 - conversion factor for mine gas level, take value as per Appendix B; k4 - conversion factor for mine water inflow, take value as per Appendix B; k5 - conversion factor for single-well production capacity, take value as per Appendix B; Mjg - output of raw coal in underground mine, in t.