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

GB/T 24851-2024

Replacing GB/T 24851-2010

**Specification for equipping and managing of measuring
instrument of energy in building material industry**

建筑材料行业能源计量器具配备和管理要求

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Table of Contents

Foreword

1 Scope

2 Normative references

3 Terms and definitions

3.1 [Source. GB/T 19022-2003, 3.1]

4 Requirements for the equipment of energy metering instruments

4.1 Types and scope of energy measurement

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 replaces GB/T 24851-2010 "Energy Metering Equipment and Management Requirements for Building Materials Industry" and is compatible with GB/T 24851- Compared with 2010, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) The scope has been changed (see Chapter 1, Chapter 1 of the 2010 edition);
- b) The energy type has been changed (see 4.1, 4.1 of the 2010 edition);
- c) The principles for the allocation of energy metering instruments have been changed (see 4.2, 4.3 of the 2010 edition);
- d) The performance requirements for energy metering instruments have been deleted (see 4.3.3 of the 2010 edition);
- e) Added requirements for energy metering equipment for major secondary energy-consuming units and major energy-consuming equipment that do not meet the limit values (see 4.3.3, 4.3.4);
- f) Added energy types in Table 1, Table 2 and Table 3 (see 4.3 and 4.4);
- g) The classification and accuracy grade requirements of measuring instruments have been changed (see Table 4, Table 4 of the 2010 edition);
- h) The energy measurement management system has been changed (see 5.1, 5.1 of the 2010 edition);

- i) The energy metering personnel have been changed (see 5.2, 5.2 of the 2010 edition);
- j) Deleted the requirement that personnel who verify and calibrate energy measuring instruments in the building materials industry should have the corresponding qualifications (see the 2010 edition of 5.2.3);
- k) Changes have been made to the energy metering equipment records and equipment identification requirements (see 5.3, 5.3 of the 2010 edition);
- l) The requirements for value transfer or traceability diagrams for energy metering instruments have been deleted (see 5.3.3 of the 2010 edition);
- m) Changes have been made to the energy statistics reporting system, energy metering data recording, and requirements for establishing an energy management center (see 5.4, 2010 edition). 5.4).

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed and coordinated by the National Technical Committee for Standardization of Energy Fundamentals and Management (SAC/TC20).

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This document was first published in 2010; this is the first revision.

Energy metering equipment for building materials industry Management Requirements

1 Scope

This document specifies the requirements for the equipment of energy metering instruments and the management requirements for energy metering instruments in

energy-consuming units in the building materials industry.

This document applies to enterprises with independent legal status and energy-consuming units with independent accounting capabilities in the building materials industry.

2 Normative references

GB 17167

GB/T 19022

GB/T 23331

3 Terms and definitions

The terms and definitions defined in GB 17167 and the following apply to this document.

3.1 [Source. GB/T 19022-2003, 3.1]

A set of interrelated or interacting elements necessary to achieve metrological confirmation and to maintain control of a measurement process.

4.1 Types and scope of energy measurement

4.1.1 The types of energy should comply with national statistical laws, regulations and relevant standards, including primary energy, secondary energy, alternative fuels and Energy carrying fluid.

Note. Primary energy refers to energy obtained from nature without any processing, change or conversion, such as raw coal, crude oil, natural gas, biomass energy, hydropower, nuclear energy, etc.

And solar energy, geothermal energy, tidal energy, wind energy, ocean energy, etc.

Secondary energy refers to other types or forms of energy obtained by processing or conversion of primary energy, including gas, coke, gasoline, kerosene, diesel, heavy Oil, electricity, hydrogen, etc.

Alternative fuels refer to combustibles that are used as heat sources in the production of building materials industry to replace traditional fossil fuels.

Waste and by-products, biomass, etc.

Energy-carrying working fluid refers to a medium that can absorb or release energy due to changes in its own state parameters, that is, the medium is a carrier of energy, such as steam.

4.1.2 The scope of energy measurement includes.

- a) Energy and energy-carrying fluids input into energy-consuming units, sub-energy-consuming units and energy-consuming equipment;
- b) The energy and energy-carrying medium of the output energy-consuming units, secondary energy-consuming units and energy-consuming equipment;

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