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

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**Technical regulation on energy saving for blockboard
production**
(English Translation)

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard was proposed by the Forestry Energy Management Sub-Technical Committee (SAC/TC20/SC7) of the National Energy Foundation and Management Standardization Technical Committee Get out and back.

Drafting organizations of this standard. Heilongjiang Forest Engineering and Environment Research Institute, Millennium Zhou New Material Technology Group Co., Ltd., Quzhou Ruijin Wood Co., Ltd., Xuzhou Huake Wood Co., Ltd., Heilongjiang Provincial Institute of Wood Science, National Quality Supervision and Inspection of Wooden Furniture and Wood-based Panels Inspection Center (Xuzhou), Nanning Ketian Water-based Wood Industry Co., Ltd., Quzhou.

1 Scope

This standard defines the terms and definitions of blockboard production, and specifies the planning and design of energy saving, production equipment selection, energy saving, and dust removal system.

Energy, compressed air system energy saving, operation and maintenance energy saving, and optional blockboard production energy saving technology.

This standard applies to energy-saving management of blockboard production.

2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this article Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB/T 3485 Technical Guidelines for Evaluating Reasonable Electricity Use of Enterprises
GB/T 4272 General rules for thermal insulation of equipment and pipelines GB/T 5849
Blockboard GB/T 5856 General Specifications for Hot Press GB/T 12497 Three-phase
asynchronous motor economic operation GB/T 17954 Industrial boiler economic operation
GB/T 18004 General technical requirements for roller sanders GB/T 18262 General
technical requirements for wood-based panel machinery GB 19153 Energy efficiency limit
value and energy efficiency level of integrated air compressor GB/T 22675 Flat sander GB
50029 compressed air station design code LY/T 1287 Energy-saving monitoring method for
wood-based panel hot press LY/T 1659 Technical rules for industrial productive dust control
in wood-based panels LY/T 1806 Code for design of pneumatic dust removal (transport)
system in wood industry LY/T 1862 Energy-saving technical specifications for pneumatic
transportation and dust removal systems in the wood industry LY/T 2071 Comprehensive
energy consumption for blockboard production TSG G0002 Boiler Energy-saving
Technology Supervision and Management Regulations

3 Terms and definitions

The terms and definitions defined in GB/T 5849 and LY/T 2071 and the following terms apply to this document.

Blockboard

A wood-based panel composed of wooden strips along the direction of the grain, with two sides glued to the veneer or plywood blank.

Blockboard production During the completion of blockboard processing, the machine is from sliver processing, core molding, core post-processing, blockboard molding and finished product molding.

The combination of bed equipment and supporting system equipment. Generally includes. veneer manufacturing, sawing, drying, thickness-setting processing, glue-splicing, pre-pressing of embryos, hot pressing, Post-processing and other processes.

Key electromotors

Motors with high rated power, high load factor or long-term running in production.

4 Planning and design

4.1

Principle. On the premise of meeting the requirements of production technology, environmental protection, safe production and energy saving and emission reduction, according to the product variety, specifications and Production, etc., through scientific planning and design, the production equipment selection, plant area, pattern, ventilation, lighting, heating, thermal insulation and dust removal systems, Compressed air systems are reasonably matched to achieve scientific production planning and design, low investment, low energy consumption, and economical and reliable operation.

4.2

The overall planning and design of the power supply system, the rationalization of power supply for the enterprise, the rationalization of electrical energy conversion to mechanical energy, and the rationalization of corporate lighting should meet the requirements of GB/T 3485.

4.3

The overall design and layout of the compressed air station shall meet the requirements of GB 50029 and GB 19153.

4.4

The design of pneumatic dust removal (transport) system shall comply with the requirements of LY/T 1806; the basic dust prevention rules and technical requirements for dust prevention shall comply with LY/T Regulations of 1659; Energy saving methods shall comply with the regulations of LY/T 1862.

5 Production equipment selection

5.1

Principle. The selection of production equipment should be compatible with the output, type, specifications, process flow, continuity and degree of automation of the product.

5.2

The technical requirements of the sander shall meet the requirements of GB/T 22675 and GB/T 18004.

5.3

The technical requirements and qualification indexes of the hot press shall meet the requirements of GB/T 5856 and LY/T 1287.

5.4

The boiler should be selected to suit the type of fuel, and its energy efficiency index should meet the relevant regulations of GB/T 17954 and TSG G0002.

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5.5

The boiler body of the boiler heating system and the attached thermal equipment and piping shall be properly insulated in accordance with the provisions of GB/T 4272.

5.6

The principles and technical conditions for economic operation of key electric motors, replacement or modification shall comply with the relevant provisions of GB/T 12497.

5.7

The requirements for performance, structure, display device and safety protection of other equipment shall meet the requirements of GB/T 18262.

6 Dust removal system energy saving

6.1

Dust removal system should preferentially use energy-saving fans to reduce system energy consumption.

6.2

The dust removal pipeline system shall be sealed and reliable, and shall be regularly inspected to prevent dust leakage.

6.3

The dust removal system should be in good condition during operation, and each regulating valve should be flexible and reliable.

6.4

The path of the dust suction duct should be short, and the dust collector should be installed as close as possible to the equipment with a large amount of dust.

7 Energy saving in compressed air systems

7.1

The piping of the compressed air system should be made of anti-rust and corrosion-resistant materials. The diameter of the piping can be appropriately larger than the theoretical calculation value.

Low pressure loss control valves and fittings, etc., and reduce the number of valves used as