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**INDUSTRY STANDARD OF THE
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LY/T 1286-1998

**Energy saving monitoring method for shaving dryer
(English Translation)**

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Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Terms and Definitions
- 4 Monitoring items
- 4.1 Inspection items

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 LY/T 1286-2012 "Energy Saving Monitoring Method for Wood Shaving Dryers".

In addition to rectification and editorial changes, the main technical changes are as follows.

- a) The scope of application of energy-saving monitoring of particle dryers has been added (see Chapter 1, Chapter 1 of the 2012 edition);
- b) Added normative references GB 18613, GB 19761, GB 19762 (see Chapter 2);
- c) In the monitoring project, the inspection item of the ratio of the carbonized layer coverage area to the total area of the inner wall of the heat dissipation pipe inside the dryer is deleted (see 3.1, 3.1 of the 2012 edition);
- d) The monitoring method is deleted, and the monitoring requirements and methods are added (see Chapter 5, Chapter 4 of the 2012 edition);
- e) The monitoring requirements have been changed, and the monitoring scope, monitoring conditions and test instruments have been added (see 5.1, 4.1 of the 2012 edition);
- f) Changed the inspection items of equipment status (see 5.2.1, 4.2.1 of the 2012 edition);
- g) The content of the heat transfer medium index inspection items has been changed, and the change range is given for the inspection requirements of the kinematic viscosity ratio in the heat transfer oil index percentage. For the inspection requirements of carbon residue increase value in the heat transfer oil index, the percentage of carbon residue increase is given (see 5.2.4, 2012 version 4.5);

- h) Deleted the inspection of the ratio of the carbonization layer coverage area to the total area of the inner wall of the heat dissipation pipe inside the dryer (see 4.6 of the 2012 edition);
 - i) Changed the test content of condensing water temperature (see 5.2.7, 4.9 of the 2012 edition);
 - j) The test method for the surface temperature of the insulation layer and the test method for the surface temperature of the pipe insulation layer have been changed (see 5.2.9, 2012 edition 4.11);
 - k) Added the content of hot air recycling rate test (see 5.2.10);
 - l) Changed the content of equipment status (see 6.1, 5.1 of the 2012 edition);
 - m) In the energy-saving monitoring qualification index table of the particle dryer, the heat source option and hot air recovery utilization rate (%) items of the dryer are added, and the items are deleted.
- Added the item of carbonized layer coverage (%) (see Table 1, Table 1 of the 2012 edition);
- n) Changed the content of the result evaluation (see 7.1, 6.1 of the 2012 edition);
 - o) Changed the test method for the thermal efficiency of the shaving dryer (see Appendix A, Appendix A of the 2012 edition);
 - p) Changed the content in the energy-saving monitoring report of the shaving dryer (see Appendix B, Appendix B of the 2012 edition).

Please note that some contents of this document may refer to patents. The issuing agency of this document assumes no responsibility for identifying patents.

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1 Scope

This document specifies the energy-saving monitoring items, monitoring requirements and methods, qualification indicators and result evaluation of particle dryers.

This document applies to rotor-type particle dryers that use heat-conducting oil and steam as heating media, and also applies to single-unit dryers that use high-temperature flue gas as heating media.

channel, three channel shavings dryer.

2 Normative references

The contents of the following documents constitute the essential provisions of this standard through normative references in the text. Among them, the dated references Standards, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies to this document.

GB/T 265 Petroleum Products Kinematic Viscosity Determination Method and Dynamic Viscosity Calculation Method GB/T 268 Determination of Carbon Residue in Petroleum Products (Kangshi) Method GB/T 2587 General rules for energy balance of energy-using equipment GB/T 2588 General rules for calculating thermal efficiency of equipment GB/T 4272 General Rules for Equipment and Pipeline Insulation Technology GB/T 12712 Technical management requirements for condensate recovery and steam traps in steam heating systems GB/T 15914 Energy Saving Monitoring Method for Steam Heating Equipment GB 17167 General rules for equipment and management of energy measuring instruments for energy-consuming units GB 18613 Allowable Values of Energy Efficiency and Energy Efficiency Grades of Electric Motors GB 19761 Ventilation fan energy efficiency allowable value and energy efficiency grade GB 19762 Allowable Values of Energy Efficiency and Energy Efficiency Grades for Centrifugal Pumps LY/T 1287 Energy saving monitoring method for wood-based panel hot press

3 Terms and Definitions

This document does not have terms and definitions that need to be defined.

4.1 Inspection items

Inspection items include.

- a) equipment condition;
- b) Dryer thermal efficiency;
- c) The recycling status of condensed water;
- d) The heat transfer medium index of the dryer.