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

LY/T 1114-1993

Replacing LY/T 1114-2011

**Comprehensive energy consumption of rosin production
(English Translation)**

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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 of Standardization Documents" Drafting.

This document replaces LY/T 1114-2011 "Comprehensive Energy Consumption for Rosin Production". Compared with LY/T 1114-2011, this standard has major technical changes.

Change as follows.

- a) Modified the grading index of energy consumption per unit output of rosin (see Chapter 4, 4.1 of the 2011 edition);
- b) Deleted part of the definition and terminology (see Chapter 3, Chapter 3 of the 2011 edition);
- c) Deleted the production process correction factor (see 5.4.1 of the 2011 edition);
- d) The correction factor for distillation method has been deleted (see 5.4.2 of the 2011 edition);
- e) The output correction factor is deleted (see 5.4.3 of the 2011 edition);
- f) The data processing method has been deleted (see Chapter 7 of the 2011 edition).

This document was proposed by the Forestry Energy Management Sub-Technical

Committee of the National Energy Fundamental and Management Standardization
Technical Committee (SAC/TC20/SC7) Go out and go out.

1 Scope

This document defines the terms and definitions of the comprehensive energy consumption of rosin production, and stipulates the grading index and calculation principle of the comprehensive energy consumption per unit output of rosin and methods, energy consumption testing and measurement requirements.

This document is applicable to the calculation and index assessment of the comprehensive energy consumption of rosin production enterprises.

2 Normative references

The content of the following documents constitutes an indispensable clause of the cost document through normative references in the text. Among them, dated quotations Only the version on that date is applicable to this document. For undated references, the latest version (including all amendments) is applicable to this file.

GB/T 2589 General Rules for Comprehensive Energy Consumption Calculation GB/T 6422 Energy Test Guidelines for Energy-using Equipment GB/T 15316 General Rules for Energy-saving Monitoring Technology GB 17167 General rules for the provision and management of energy measuring instruments for energy-consuming units LY/T 2394 Management Specification for Energy Measuring Instruments for Forestry Enterprises

3 Terms and definitions

The following terms and definitions apply to this document.

Comprehensive energy consumption of rosin production During the statistical reporting period, the rosin production enterprise actually consumes various kinds of energy in kind, according to the prescribed calculation method and unit, respectively, converted it is the sum of standard coal.

Comprehensive energy consumption for unit output value of product During the statistical reporting period, the ratio of the comprehensive energy consumption of rosin production to the output of qualified products.

Direct production

Activities or operations directly related to the production of rosin, including unloading, conveying, feeding, dissolving, deslagging, clarification, distillation, packaging and warehousing and other processes.

Indirect production

Production activities that provide supporting services for direct production, including auxiliary production systems and auxiliary production systems.

Auxiliary production system the production system necessary to realize the safety and economy of rosin production, including the maintenance of production equipment, the cleaning of processing residues, waste water and exhaust gas Processing, production workshop heating (or cooling), production workshop lighting, analysis and testing, instrument verification and in-plant transportation for production activities.

Subsidiary production system the facilities required to ensure the production of rosin include grease storage tanks, factories, warehouses, public heating (or cooling) and lighting related to production.

4 Classification index of comprehensive energy consumption per unit output

Refer to Table 1 for the comprehensive energy consumption grading index per unit output.

5.1 Calculation principle

The calculation of comprehensive energy consumption for rosin production shall comply with the relevant regulations of GB/T 2589. Common energy and energy-consuming working fluids are converted into standard coal coefficients in accordance with the attached Record A's regulations. For units producing self-produced steam, the amount of steam shall not be double-calculated with the amount of coal consumed.

5.2 Calculation method of comprehensive energy consumption

The calculation of comprehensive energy consumption is carried out according to formula (1) or (2).

5.3 Calculation method of comprehensive energy consumption per unit output

The calculation of comprehensive energy consumption per unit output is carried out according to formula (3).

6.1 Energy consumption test

6.1.1

The equipment and management of energy measuring instruments shall meet the requirements of GB 17167 and LY/T 2394.

6.1.2

The test should be carried out during normal production and when the working conditions of the production equipment are stable.

6.1.3

The test method should meet the requirements of GB/T 15316 and GB/T 6422.

6.2.1 Measurement of steam consumption

Install steam flow meters in the production workshop to measure the amount of steam consumed.

6.2.2 Measurement of electric energy consumption

Install an electric energy meter in the production workshop to measure the consumed electric energy.

6.2.3 Measurement of water consumption

Install a water meter in the production workshop to measure the amount of water consumed.

6.2.4 Measurement of compressed air

The energy consumption of compressed air is measured by the actual power consumption of the air compressor.

6.2.5 Measurement of raw coal (biomass)

Install measuring instruments before the coal (biomass) is sent to the boiler, and measure it according to the actual coal (biomass) consumption of the boiler.

6.2.6 Measurement of fuel consumption (gasoline, diesel, etc.)

The consumption of oil (gasoline, diesel, etc.) is measured by the actual consumption of all relevant fuel-consuming equipment.

Appendix A

(Informative appendix) Common energy and energy-consuming working fluids converted into standard coal coefficient A.1 Coefficient of energy and energy-consuming working fluid converted to standard coal the energy and energy-consuming working fluids commonly used in the production of rosin are converted into standard coal coefficients in Table A.1.