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LY

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

LY/T 1196-1996

Replacing LY/T 1196.2-2004; LY/T 1196.1-2004

**Forestry machinery - Portable pulse foggers
(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 replaces LY/T 1196.1-2004 "Portable Pulse Smoke Machine Part 1. Technical Conditions" and LY/T 1196.2-

2004 Portable Pulsed Smoke Machine Part 2. Test Methods, compared to LY/T 1196.1-2004 and LY/T 1196.2-2004 the main technical changes are as follows.

- a) Modify the standard name to "Forest Machinery Portable Pulse Smoke Machine";
- b) modified the contents of the normative references (see Chapter 2, Chapter 2 of LY/T 1196.1-2004 and LY/T 1196.2-2004) chapter 2);
- c) increase the terminology and definition of pulsed smoke machines (see 3.1);
- d) Revised the terms and definitions of pulse engine, combustion chamber-nozzle, rated spray quantity, and liquid tank residual liquid volume (see 3.2, 3.3, 3.4, 3.6, LY/T 1196.1-2004 3.2, 3.3, 3.1, 3.5);
- e) removed the terminology and definition of a safety valve (3.4 of LY/T 1196.1-2004);
- f) deleted the classification of the smoke machine (4.1 of LY/T 1196.1-2004);
- g) modified the model preparation method (see 4.1, LY/T 1196.1-2004 4.2);
- h) added major technical parameters (see Chapter 5);
- i) modified the starting performance test method (see 6.2.1.2, 5.3 of LY/T 1196.2-2004);
- j) modified the requirements for the effect of the fuming effect and its test methods (see 6.2.2, 5.2.2 of LY/T 1196.1-2004 and 5.3.3) of LY/T 1196.2-2004;
- k) Removed the requirement for a safety valve (5.2.3 of LY/T 1196.1-2004);
- l) increased requirements for droplet size and test methods (see 6.2.3);
- m) increasing the requirements and test methods for the pressure relief performance of the drug switch (see 6.2.5);

- n) A test method for increasing the amount of residual liquid in the tank (see 6.2.6.2);
- o) The test method for modifying the performance of the horizontal oscillating spray of the whole machine (see 6.2.7.2, 5.10.1 of LY/T 1196.2-2004);
- p) increase the requirements and test methods for the tank (see 6.3.2);
- q) modified the requirements of the combustor-nozzle and the test method (see 6.3.3, 5.3.2 of LY/T 1196.1-2004 and 5.9 of LY/T 1196.2-2004);
- r) modified the requirements for the drug switch and added test methods (see 6.3.4, 5.3.3 of LY/T 1196.1-2004);
- s) modified the requirements of the high voltage generator and added test methods (see 6.3.5, 5.3.4 of LY/T 1196.1-2004);
- t) modified the requirements and test methods for the harness (see 6.3.6, LY/T 1196.1-2004, 5.3.5 and LY/T 1196.2-2004) 5.8);
- u) modified the requirements for high temperature protection and added test methods (see 6.4.1, 5.2.4 of LY/T 1196.1-2004);
- v) the requirement for a check valve has been removed (5.7.3.6 of LY/T 1196.1-2004);
- w) Modify "fault-free working time" to "average working time before first failure" and modify its contents to increase the test method (see 6.5, LY/T 1196.1-2004 5.2.8);
- x) increased requirements for appearance quality and test methods (see 6.6);
- y) increased assembly quality requirements and test methods (see 6.7);
- z) the production test was deleted (Chapter 6 of LY/T 1196.2-2004);
- Aa) Removed the durability test (Chapter 7 of LY/T 1196.2-2004);
- Bb) added third party inspections (see 7.4);
- Cc) increased the requirements and test methods of the instruction manual (see 8.2);
- Dd) Amend the "normative appendix" to "informative appendix" and delete Appendix A, Appendix B, Appendix C, Appendix D, Appendix F (Appendix A, Appendix B, Appendix C, Appendix D, Appendix F of LY/T 1196.2-2004).

This standard is proposed and managed by the National Forestry Machinery Standardization Technical Committee (SAC/TC61).

1 Scope

This standard specifies the terms, definitions, model preparation methods, and main methods of forestry machinery portable pulse smoke machine (hereinafter referred to as "smoke machine").

Technical parameters, technical requirements, test methods, inspection rules, signs, instructions for use, packaging, transportation and storage.

This standard applies to portable fog machines that use a pulsed engine as the heat source.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 191 packaging storage and transportation icon GB/T 2828.4 Test procedures for counting sampling - Part 4. Procedures for assessing quality levels GB/T 9480 Agricultural and forestry tractors and machinery, lawn and gardening power machinery manual Safety of agricultural and forestry tractors and machinery - Part 6. Plant protection machinery General technical conditions for GB/T 13384 mechanical and electrical product packaging JB/T 5673 General technical conditions for painting of agricultural and forestry tractors and implements LY/T 1045 forestry machinery model preparation method

3 Terms and definitions

The following terms and definitions apply to this document.

Pulse smoke machine pulsefogger A machine that uses a pulsed engine as a heat source to generate a high-temperature, high-speed airflow in the nozzle to achieve a hot aerosolizing process.

Pulse engine a combination of a specific acoustic structure and heating conditions to form a pulsating combustion in the combustion chamber at a certain resonant frequency within the nozzle an engine that forms a high-temperature, high-speed pulsating airflow and discharges exhaust gas periodically from the outlet of the nozzle.

Combustion chamber - nozzle combustionchamberandexhausttube A device that combusts a mixture of air and fuel in a combustion chamber, ejects through a nozzle, and thermally sterilizes the chemical.

Rated spray amount nominalflowrateofinsecticide the amount of liquid medicine sprayed out per unit time under normal working conditions when the smoke machine is in the normal working position.

Thermal aerosol thermalfogformulations Dissolve the pesticide in a solvent with appropriate flash point and viscosity, and then add other ingredients to prepare a certain specification.

When it is sent to the nozzle and mixed with the high-temperature high-speed airflow, it is

immediately cracked and evaporated into a very fine hot mist droplet, which is sprayed from the nozzle outlet to