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

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**Garden machinery - Hand-held chain-saws with lithium-ion
battery as power source**

园林机械 以锂离子电池为动力源的手持式链锯
(English Translation)

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1 Scope

This standard specifies the terms and definitions, model preparation methods, basic parameters, technical requirements, test methods, signs, instruction manuals, packaging, transport, storage, handling of hand-held chain-saws with lithium-ion battery as power source (hereinafter referred to as chain-saws with lithium-ion battery).

This standard applies to hand-held chain-saws, which are operated by a single person, for sawing branches, wood and similar materials; are powered by a rechargeable lithium-ion battery pack (battery pack) with a nominal voltage not greater than DC 75V, under normal environmental conditions.

This standard does not apply to.

- Lithium-ion chain-saws for one-handed operation and/or for use at heights, such as in trees;
- Hand-held chain-saws, which are powered by user-installed universal battery packs or battery packs;
- Other hand-held chain-saws, which are powered by non-lithium-ion batteries.

2 Normative references

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) is applicable to this standard.

GB/T 191 Packaging - Pictorial marking for handling of goods

GB/T 755 Rotating electrical machines - Rating and performance

GB/T 3883.1-2014 Safety of handheld motor operated electric tools - Part 2.

Particular requirements for spray guns for non-flammable liquids

GB/T 3883.14-2007 Safety of hand-held power tools - Part 2.Special requirements for chain-saws

GB 4343.1 Electromagnetic compatibility - Requirements for household appliances electric tools and similar apparatus - Part 1.Emission

3 Terms and definitions

The terms and definitions, which are defined in GB/T 18960, as well as the following terms and definitions, apply to this document.

3.1

Nominal voltage

The product of the nominal voltage of a single cell and the number of cells in series.

3.2

Cutting efficiency

Under the load of the rated output state, the area of the standard test material, which is cut by the lithium-ion chain-saw per unit time.

Note: The unit is square centimeters per second.

3.3

Net mass of the machine

In the working state, the mass of the lithium-ion chain-saw, including the guide plate and saw chain as specified in the installation instructions, the pluggable adaptable battery pack (except for the split battery pack, which is connected to the whole machine by a flexible cord), without the knife cover and lubricating oil.

4 Model preparation method

4.1

The model preparation method of lithium-ion chain-saw shall be carried out, in accordance with the provisions of LY/T 1621.

5 Basic parameters

Basic parameters include the following.

6.1 General requirements

6.1.1

The lithium-ion chain saw shall be able to run continuously, under the rated working conditions under the following environmental conditions.

6.1.2

During inspection, the precision of the measured value shall be within the following range.

k) Angle. $\pm 1^\circ$.

6.3.1.1 Requirements

The lithium-ion chain saw shall be able to start normally, under the environmental conditions specified in 6.1.1 (or the environmental conditions specified in the instruction manual). There shall be no sticking or failure to start, during the starting process.

6.3.5.1 Requirements

The cutting efficiency of the lithium-ion chain saw shall meet the requirements in Table 1.

6.4.1.1 Requirements

The saw chain of the lithium-ion chain saw shall meet the requirements of LY/T 1187.

7.1.1 Requirements

7.1.1.4

Safety warning signs shall meet the following requirements.

7.1.2 Inspection

The quality of the appearance of the sign is checked visually.

The scratch resistance and adhesion testing of the sign shall be carried out, in accordance with the provisions of GB 19726.1.

7.3.2 Inspection

Checked by visual inspection.

7.4 Transport

7.4.1

During loading, unloading and transportation, it shall not be rolled, inverted, or placed horizontally; it shall not be subjected to severe impact and collision; it shall not be shipped together with wet items or chemicals.

7.4.2

The transportation of the adaptable battery pack shall comply with the provisions of GB/T 34570.1.

7.4.3

Anti-rust measures shall be taken before leaving the factory.

7.6 Handling

The handling of the adaptable battery pack shall comply with the provisions of GB/T 34570.1.

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