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**Forestry machinery - Internal combustion engine powered
semi-trailed branch chippers
(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.

1 Scope

This document specifies the terms and definitions of the semi-hanging branch shredder powered by an internal combustion engine (hereinafter referred to as the shredder), model establishment and Series type spectrum, basic parameters, technical requirements and test methods, signs, instructions for use, packaging, transportation and storage.

This document is applicable to the use of reciprocating piston internal combustion engines in forest areas such as logging, management, municipal, landscaping and other sites.

Work when the position is fixed, automatically feed the wood and bamboo branches containing the main trunk through the feed trough with a horizontal or approximately horizontal bottom plate, and and at the corresponding safe distance from the crushing device or the independent feeding device, the size of the feeding port is greater than 400 mm x 400 mm with a semi-hanging type the branch shredder of the chassis.

This document does not apply to the relevant requirements of the national road safety regulations when the shredder is transferred to transportation.

This document does not apply to shredders with one or more of the following functions or structural features.

- a) The feed chute is equipped with an extended workbench or a built-in conveyor chain beyond the outer edge of the bottom of the feed chute;
- b) With belt feeding device;
- c) With mechanical charging device;

d) With mechanical discharge device.

2 Normative references

The contents of the following documents constitute the indispensable clauses of this document through normative references in the text. Among them, dated reference documents, Only the version corresponding to that date is applicable to this document; for undated references, the latest version (including all amendments) is applicable to this document file.

GB/T 191 Packaging, storage and transportation pictorial signs GB/T 1184-1996 shape and position tolerance without tolerance value GB/T 2408-2008 Determination of the burning properties of plastics by horizontal and vertical methods GB/T 3098.1 Mechanical properties of fasteners bolts, screws and studs GB/T 3766 General rules and safety requirements for hydraulic transmission systems and their components GB 3770 Determination of noise power level of woodworking machine tools GB/T 4269.1 Symbols for operator control mechanisms and other display devices of agricultural and forestry tractors and machinery, lawn and garden power machinery Part 1: Common symbols GB 4785 Regulations for the installation of external lighting and light signal devices for automobiles and trailers GB/T 5008.1 Lead-acid batteries for starting Part 1: Technical conditions and test methods GB/T 5013.4 Rubber insulated cables with rated voltages up to and including 450/750V Part 4: Flexible wires and flexible cables GB/T 5023.5 Polyvinyl chloride insulated cables with rated voltages up to and including 450/750V. Part 5: Flexible cables (flexible wires) GB/T 5226.1 Electrical safety of machinery Electrical equipment of machinery Part 1: General technical conditions GB/T 6072.1 Performance of reciprocating internal combustion engines Part 1: Calibration and test methods for power, fuel consumption and oil consumption Additional requirements for the engine GB 7258 Safety technical conditions for motor vehicle operation GB/T 9239.1 Mechanical vibration constant (rigid) rotor balance quality requirements Part 1: Specification and balance tolerance test GB/T 9480 Rules for the compilation of manuals for agricultural and forestry tractors and machinery, lawn and garden power machinery GB 10396 General rules for safety signs and hazard graphics for agricultural and forestry tractors and machinery, lawn and garden power machinery GB 12676 Technical requirements and test methods for braking systems of commercial vehicles and trailers GB/T 13306 signs GB/T 13384 General technical conditions for packaging of mechanical and electrical products GB 18296 Safety performance requirements and test methods for automobile fuel tanks GB 20891 Limits and measurement methods of exhaust pollutants from diesel engines for non-road mobile machinery (China's third and fourth stages) GB 23254 Reflective marking of truck and trailer body GB 23821-2009 Safety distance of machinery to prevent the upper and lower limbs from touching the dangerous zone GB 26133 Limits and measurement methods for exhaust pollutants from small ignition engines for non-road mobile machinery GB/T 31202 Agricultural and forestry machinery and garden machinery hand-held control and hand-held control machinery hot surface

accessibility determination GB/T 32538 Mechanical connection device for agricultural vehicles towed vehicles GB/T 35350 Requirements and test methods for mechanical connection devices between tractors and towed vehicles JB/T 5673 General technical conditions for painting agricultural and forestry tractors and machinery JB/T 6710 Technical conditions of alternator for motor vehicles and internal combustion engines QC/T 717 Requirements and testing methods for wheel runout of automobiles QC/T 1067.1 Automotive wire harnesses and connectors for electrical equipment Part 1: Definitions, test methods and general performance requirements

3 Terms and definitions

The following terms and definitions apply to this document.

Semi-trailed chassis when the load is evenly loaded, the overall center of mass is located between the axle of the chassis and the traction coupling point, and it is kept level by the auxiliary support when it is separated from the tractor.

The vehicle chassis is in a stable state and equipped with a dedicated tractor connection device.

Semi-trailed branch chipper Installed on a semi-trailer chassis, through the physical effects of shearing, tearing and impact caused by the rotation of the operating parts, the wood and bamboo including the main trunk Branches form a machine with a length of less than 50 mm scraps (see Figure 1).

Note: When the natural passing clearance of the feeding device is greater than 25 mm, the reference surface is located at its minimum clearance; when there is no feeding device, the reference surface is located at the cutting device Close to the outermost side of the feeding operation position.

4 Model establishment and series spectrum

Model establishment

The model of the shredder consists of five parts. group code, characteristic code, series code, main parameter code and variant code.

The model preparation method is shown in Figure 2.

Example. QCG500-34A means that the knife roller diameter is 500 mm, the required power is 34 kW, and the first modified diesel-powered drum chopping...