ICS 65.060.10
CCS T61

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 13875-2015

Replacing GB/T 13875-2004

Walking tractors - General requirement

手扶拖拉机 通用技术条件

Issued on: December 10, 2015 **Implemented on: July 1, 2016**

Issued by: General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China;
Standardization Administration of China

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1 Scope

GB/T 13875-2015 is the Chinese national standard on walking tractors - general requirement, in the field of agriculture. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 10 December 2015 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 July 2016. Classification: ICS 65.060.10, CCS T61. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the

issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the technical requirements, test methods, inspection rules, delivery, marking, transportation and storage of walking tractors. This standard is applicable to walking tractors (hereinafter referred to as tractors), and other power tools whose handrails are controlled by the driver on foot can also be referred to carried out.

2 Walking Tractor

GB/T 19407 Maximum control force of agricultural tractor control device

GB 20891 Diesel engine exhaust pollutant emission limits and measurement methods for non-road mobile machinery (China's third and fourth stages)

GB/T 21959 Technical requirements for tractor transport unit

GB/T 24645 Tractor mud-water tightness test method

GB/T 24648.1 Reliability Assessment of Tractors

JB/T 5673 General technical conditions for painting agricultural and forestry tractors and machinery

JB/T 6294 Type Inspection Rules for Agricultural Tractors

JB/T 6697 Basic technical conditions for electrical equipment of motor vehicles and internal combustion engines

JB/T 6701 Tractor headlight

JB/T 6712 Tractor appearance quality requirements

JB/T 6717 Hand Tractor Handrail Vibration Evaluation Index

JB/T 9832.2-1999 Agricultural and forestry tractors and machinery paint film adhesion performance determination method Press cutting method

JB/T 10651 walking tractor chassis NY2187 tractor number plate setting technical requirements

3.1 General requirements

3.1.1 Tractors should be manufactured in accordance with product drawings and technical documents approved by prescribed procedures.

3.1.2 If the parts and components on the tractor are connected with fasteners, they should be firmly connected as required, and there should be no looseness.

3.1.3 When the tractor is working normally, there should be no abnormal noise and odor in

all systems, and there should be no oil leakage, water leakage, air leakage, or electricity leakage; the engine should not Allow oil to escape.

3.1.4 The appearance quality of the tractor should meet the requirements of JB/T 6712.Tractor painting should meet the requirements of JB/T 5673, paint film adhesion The energy should not be lower than the level II specified in JB/T 9832.2-1999.

3.1.5 Each control mechanism should be light and flexible, with moderate tightness. The itinerary of each agency shall comply with the provisions of the instruction manual. All automatic return operations The longitudinal parts shall be able to reset automatically after the control force is removed. The non-auto-returning manipulator should be able to stop reliably in the maneuvering position. The most of each control device The large control force should meet the requirements of GB/T 19407.

3.1.6 The gearbox should be free of disorderly gears and automatic de-gearing.

3.1.7 The engine should be able to operate stably within the full speed regulation range, and be able to stop the engine directly or indirectly through the flameout device.

3.1.8 The drive belt groove of the engine pulley and the transmission belt groove of the clutch pulley should be aligned, and the tension of each transmission belt should be moderate, and basically the same. It should be able to reliably transmit the full torque of the engine.

3.1.9 The clutch should be able to separate completely and engage smoothly, and should be able to transmit the full torque of the engine when engaged.

3.1.10 The steering mechanism should be able to ensure flexible and reliable steering of the tractor.

3.1.11 The lifting and lowering of the tail wheel should be able to rotate flexibly, and there should be no jamming phenomenon or self-rotation phenomenon during travel.

3.1.12 The electrical instrument installed on the tractor should meet the requirements of JB/T 6697, and the instrument display should be clear and accurate. Headlamps should meet The provisions of JB/T 6701.The signal, alarm system, electrical, lighting and various switches should work reliably.

3.1.13 During the running-in operation and performance test, the sealing surfaces and pipe joints should be free of leakage after adjusting the fasteners twice.

3.1.14 After the muddy water test, the tractor shall not allow muddy water to penetrate into the body. Tractors for paddy fields and wetlands shall comply with the provisions of GB/T 24645 Assess muddy water resistance.

3.2 Safety and environmental protection requirements

3.2.1 The safety and environmental protection requirements of tractors should meet the

requirements of GB 18447.2.

3.2.2 The engine of the tractor should have a label that meets the requirements of GB 20891.

3.3.1 Performance of PTO shaft

3.3.1.1 At the calibrated speed of the engine, the maximum power of the PTO shaft should not be less than 95% of the value specified by the company, and the value specified by the company should not be less than 95% of the value specified by the company. Less than

0.85 times of the engine's rated power (12h).

3.3.1.2 The variable load average fuel consumption rate of the power output shaft should not be greater than 370g/(kW·h).

3.3.1.3 The torque reserve rate of the power output shaft shall not be less than 12%.

3.3.1.4 The ratio of the speed at the maximum torque point of the PTO shaft to the speed at the maximum power point of the PTO shaft (under the calibrated engine speed) should not be large. Less than 80%.

3.3.2 Engine performance of tractors without rear PTO shaft

3.3.2.1 Engine rated power (12h). at the rated speed, not less than 95% of the value indicated on the engine's label.

3.3.2.2 For the engine bench test, the variable load average fuel consumption rate is not more than 310g/(kW·h).

3.3.2.3 For the engine bench test, the engine torque reserve rate should not be less than 12%.

3.3.2.4 In the engine bench test, the ratio of the engine speed at the maximum torque point to the maximum power point speed is not more than 80%.

3.3.3 Traction performance

3.3.3.1 The maximum traction of the tractor shall not be less than the value specified by the enterprise.

3.3.3.2 The traction specific fuel consumption under the maximum traction power condition of the main ploughing operation.

a) For tractors with a calibrated power of not more than 4kW, the traction specific fuel consumption is not more than 585g/(kW·h);

b) For tractors with a calibrated power greater than 4kW but not greater than 7kW, the traction specific fuel consumption is not greater than 485g/(kW·h);