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

GB/T 35198-2017

Earth-moving machinery - Wheeled loader - Test methods

土方机械 轮胎式装载机 试验方法

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Quarantine;
Standardization Administration of China**

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1 Scope

Recommended national standard covering the preparation and the test procedures for wheeled loaders as defined in GB/T 8498; other loader types may use it for reference. It provides the common measurement basis for verifying the figures a manufacturer declares - drawbar pull, rated operating capacity and breakout force, ground speed, braking, turning dimensions, machine and component masses, bucket volumetric rating, sound power and operator-position sound pressure, whole-body vibration, fuel consumption, hydraulic fluid cleanliness and air-conditioning refrigerant. Unlike the corresponding documents for excavators and backhoe loaders, reliability testing is not part of this standard: it is handled separately under JB/T 12462 and JB/T 12463. Issued 29 December 2017 under National Standards Bulletin 2017 No. 32 and effective from 1 July 2018, it is the companion test-method document to GB/T 35199-2017 on wheeled loader specifications, and is referenced by GB/T 44258-2024 on battery electric wheel loaders for plateau tunnels. It was drafted under SAC/TC 334 with the participation of John Deere and Caterpillar's Chinese operations alongside the domestic manufacturers.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document, including any amendments, applies.

GB/T 6375 Earth-moving machinery - Method of test for the measurement of drawbar pull ·
GB/T 8498 Earth-moving machinery - Basic types - Identification, terms and definitions ·
GB/T 8499 Earth-moving machinery - Method for locating the centre of gravity · GB/T 8592
Earth-moving machinery - Determination of turning dimensions of wheeled machines ·
GB/T 8595 Earth-moving machinery - Operator's controls · GB/T 10175.1 Loaders and
backhoe loaders - Part 1: Calculation of rated operating capacity and test method for
verifying calculated tipping load · GB/T 10175.2 Loaders and backhoe loaders - Part 2: Test
method for measuring breakout forces and lift capacity to maximum lift height · GB/T 10913
Earth-moving machinery - Determination of ground speed · GB/T 16937 Earth-moving
machinery - Operator's field of view - Test method and performance criteria · GB/T 18826
1,1,1,2-tetrafluoroethane (HFC-134a) for industrial use · GB/T 20082 Hydraulic fluid power -
Fluids - Coding the level of contamination by solid particles (optical microscope) · GB
20891 Limits and measurement methods for exhaust pollutants from diesel engines of

non-road mobile machinery (China III, IV) · GB/T 21152 Earth-moving machinery - Braking systems of rubber-tyred machines - Performance requirements and test procedures · GB/T 21153 Earth-moving machinery - Units for dimensions, performance and capacities, and their measurement accuracies · GB/T 21154 Earth-moving machinery - Methods of measuring the masses of whole machines, their equipment and components · GB/T 21942 Earth-moving machinery - Loader and front-loading excavator buckets - Volumetric ratings · GB/T 25614 Earth-moving machinery - Determination of sound power level - Dynamic test conditions · GB/Z 26139 Earth-moving machinery - Guidelines for the application of whole-body vibration exposure data from international bodies and manufacturers · GB/T 28239 Non-road diesel engines - Fuel consumption and oil consumption rate limits and test methods · JB/T 12462 Wheeled loaders - Accelerated reliability test specification · JB/T 12463 Wheeled loaders - Reliability test methods, failure classification and assessment · ISO 11500 Hydraulic fluid power - Determination of particulate contamination level by automatic particle counting using the light-extinction principle