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

GB/T 43657.2-2024

**Energy efficiency of industrial trucks - Test methods - Part 2:
Operator controlled self propelled trucks, towing and burden
carrier trucks**

工业车辆能效 试验方法 第2部分：操作者控制的自行式车辆、牵引车和载运车
(English Translation)

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Foreword

This document was drafted in accordance with the provisions of GB/T 1.1-2020 "Directives for standardization - Part 1.Rules for the structure and drafting of standardizing documents".

This document is Part 2 of GB/T 43657 "Energy efficiency of industrial trucks - Test methods". GB/T 43657 has issued the following parts.

- Part 1.General;
- Part 2.Operator controlled self propelled trucks, towing and burden carrier trucks;
- Part 3.Container handling lift trucks.

This document has modified and adopted ISO 23308-2.2020 "Energy efficiency of industrial trucks - Test methods - Part 2.Operator controlled self propelled trucks, towing and burden carrier trucks".

The technical differences between this document and ISO 23308-2.2020 and their reasons are as follows.

- REPLACE ISO 23308-1 by the normative reference GB/T 43657.1-2024 (see Clause 3 of this document), to adapt to the technical conditions of China;
- ADD the content of requirements in "General requirements" (see 5.4.1 of this document), to adapt to the technical conditions of China.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. The issuing authority of this document shall not be held responsible for identifying any or all such patent rights.

This document was proposed by China Machinery Industry Federation.

This document shall be under the jurisdiction of the National Technical Committee on Industrial Trucks of Standardization Administration of China (SAC/TC 332).

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Energy efficiency of industrial trucks - Test methods -

Part 2. Operator controlled self propelled trucks, towing and burden carrier trucks

1 Scope

This document specifies the energy consumption test methods for operator-controlled self-propelled trucks, towing and burden carrier trucks.

This document applies to the following types of trucks as defined in GB/T 6104.1-2018.

- counterbalanced lift truck;
- articulated counterbalance lift truck;
- reach truck (with retractable mast or fork arm carriage);
- straddle truck;
- pallet-stacking truck;
- pallet truck;

- platform and stillage truck;
- end-controlled pallet truck;
- order-picking truck;
- centre-controlled order-picking truck;
- towing tractor, pushing tractor and burden carrier;
- towing and stacking tractor;
- side-loading truck (one side only);
- lateral-stacking truck (both sides);
- lateral- and front-stacking truck (three sides);
- multi-directional lift truck.

2 Normative references

The following referenced documents are indispensable for the application 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 6104.1-2018 Industrial trucks - Terminology and classification - Part 1.Types of industrial trucks (ISO 5053-1.2015, IDT)

GB/T 10827.1-2014 Industrial trucks - Safety requirements and verification - Part 1. Self-propelled industrial trucks, other than driverless trucks, variable-reach trucks and burden-carrier trucks (ISO 3691-1.2011, IDT)

GB/T 43657.1-2024 Energy efficiency of industrial trucks - Test methods - Part 1. General (ISO 23308-1.2020, IDT)

3 Terms and definitions

For the purpose of this document, the terms and definitions defined in GB/T 6104.1-

4 Test conditions

The test conditions shall be in accordance with the provisions of Clause 4 of GB/T 43657.1-2024.

5.1 General

GB/T 43657.1-2024 shall be applied together with 5.2, 5.3 and 5.4 of this document which describe the specific information of various types of trucks.

5.2 Test route

The cycle route for energy consumption test of self-propelled trucks is shown in Figure 1; the cycle route for energy consumption test of towing tractors and burden carriers is shown in Figure 2.

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