

BUREAU OF INDIAN STANDARDS

DRAFT FOR COMMENTS ONLY

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*भारतीय मानक मसौदा*

औद्योगिक ट्रकों की ऊर्जा दक्षता परीक्षण विधियाँ  
भाग 2: ऑपरेटर नियंत्रित स्व-चालित ट्रक, टोइंग और बोझ वाहक ट्रक

*Draft Indian Standard*

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

ICS: 53.060

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Transport Tractors, Trailers and Industrial Trucks  
Sectional Committee, TED 22

**Last Date for Comments:** 23 Aug 2024

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Transport Tractors, Trailers and Industrial Trucks Sectional Committee, TED 22

**NATIONAL FOREWORD**

This draft Indian Standard which is identical with ISO 23308-2: 2020 ‘Energy efficiency of industrial trucks — Test methods — Part 2: Operator controlled self-propelled trucks, towing and burden carrier trucks’ issued by International Organization for Standardization (ISO), will be adopted by the Bureau of Indian Standards on the recommendations of Transport Tractors, Trailers and Industrial Sectional Committee and after approval of the Transport Engineering Division Council.

The text of ISO standard is proposed for publication as an Indian Standard without deviations. Certain terminologies and conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words ‘International Standard’ appear referring to this draft standard, they should be read as ‘Indian Standard’.
- b) Comma (,) has been used as a decimal marker, while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated:

<i>International Standard</i>	<i>Corresponding Indian Standards</i>	<i>Degree of Equivalence</i>
ISO 3691-1:2011 Industrial trucks — Safety requirements and verification — Part 1: Self-propelled industrial trucks, other than driverless trucks, variable-reach trucks and burden-carrier trucks	TED/22/20354 (Modified/Technically Equivalent To: ISO 3691-1:2011) Industrial Trucks Safety Requirements And Verification Part 1: Self -Propelled Industrial Trucks Other Than Driverless Trucks Variable -Reach Trucks And Burden-Carrier Trucks (Under Development)	Modified/Technically Equivalent
ISO 5053-1 Industrial trucks — Terminology and classification — Part 1: Types	TED/22/23833 IS 7217: 1990 (Identical To: ISO 5053-1: 2020)	Identical Under Single Numbering

of industrial trucks	Classification And Nomenclature Of Powered Industrial Trucks Second Revision	
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The technical committee may review the provisions of following International Standards referred in this adopted standard and may decide if they are acceptable for use in conjunction with this draft standard:

<i>International Standard</i>	<i>Title</i>
ISO 23308-1:2020	Energy efficiency of industrial trucks Test methods-Part 1: General

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

In reporting the result of a test or analysis made in accordance with this standard, is to be rounded Off, it shall be done in accordance with IS 2: 2022 ‘Rules for rounding off numerical values (*second revision*)’.

## **SCOPE**

This document specifies the method of energy consumption measurement for the following types of industrial trucks as defined in ISO 5053-1:

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

**FOR COMPLETE TEXT OF THE DOCUMENT KINDLY REFER ISO 3691-4: 2023 or CONTACT:**

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