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

GB/T 42784.1-2023

**Rough-terrain trucks - Visibility test methods and their
verification - Part 1: Variable-reach trucks**

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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 for Standardization Documents" drafting:

This document is the first part of GB/T 42784 "Test method for field of view verification of off-road forklifts": GB/T 42784 has been issued

The following sections:

--- Part 1: Telehandlers:

This document is equivalent to ISO 18063-1:2016 "Test methods for verification of field of view for off-road forklifts - Part 1: Telescopic forklifts":

Please note that some contents of this document may refer to patents: The issuing agency of this document assumes no responsibility for identifying patents:

Introduction

With its unique structure and a variety of attachments that it can be equipped with, off-road forklifts are capable of working on many different types of vehicles:

The application is extremely wide, and foreign countries already have a complete technical standard system for off-road forklifts: At present, some domestic manufacturers have entered this field one after another:

area: This document lays a technical foundation for the realization of our country's off-road forklift products in line with international standards and the elimination of technical trade barriers:

GB/T 42784 aims to establish the test method for the field of view verification of off-road forklifts, and is intended to be composed of two parts:

--- Part 1: Telehandlers: The purpose is to specify the test method for verifying field of view of off-road telescopic forklifts:

--- Part 2: Off-road type rotary telescopic forklift: The purpose is to specify the test field of view of the cross-country rotary telescopic forklift truck:

test method:

The "scope" of this document identifies the machinery involved and the hazards, hazardous states or hazardous events that may result:

This document is a Class C standard specified in GB/T 15706:

When the requirements of Category C standards are different from those of Category A or B standards, for machinery designed and manufactured according to Category C standards, Category C

Standard requirements take precedence over other standard requirements:

Test method for verification of field of view for off-road forklifts

Part 1: Telehandlers

1 Scope

This document specifies the boundaries and radii of a 1m rectangle around an off-road telehandler for determining and evaluating the operator's field of view

Static test method on a 12m field of view test circle: This document specifies the performance requirements for the field of view:

This document applies to off-road models with the operator seat located on the left or center of the jib (excluding the operator seat located on the right side of the jib)

Telescopic forklift (hereinafter referred to as "forklift"):

This document does not apply to:

- Forklifts (reach stackers) designed to handle freight containers;
- Articulated telescopic wheel loader;
- Rotary forklift;
- Truck-mounted forklift:

NOTE: The method used does not cover the full range of the operator's field of view, but provides information to help determine the acceptability of the forklift's field of view:

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text: Among them, dated references

For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

this document:

ISO 5053-1 Terminology for industrial vehicles Part 1: Types of industrial vehicles (Industrialtrucks-Vocabulary-

Note: GB/T 6104:1-2018 Terminology and Classification of Industrial Vehicles Part 1: Types of Industrial Vehicles (ISO 5053-1:2015, IDT)

ISO 5353 Calibration points for earth-moving machinery, agricultural and forestry tractors and mechanical seats (Earth-moving machinery, and tractors)

Note: GB/T 8591-2000 Calibration points for driver's seat of earth-moving machinery (eqvISO 5353:1995)

ISO 10896-1 Safety requirements and verification for off-road forklifts Part 1: Telescopic forklifts (Rough-terrain trucks-

Note: GB/T 35205:1-2017 Safety requirements and verification for off-road forklifts Part 1: Telescopic forklifts (ISO 10896-1:2012, IDT)

ISO 12100 General principles of machinery safety design risk assessment and risk reduction (Safety of machinery-General

Note: GB/T 15706-2012 Risk Assessment and Risk Reduction of Machinery Safety Design General Principles (ISO 12100:2010, IDT)

3 Terms and Definitions

The terms and definitions defined in ISO 10896-1, ISO 5053-1 and ISO 12100 and the following apply to this document:

3:1

Test ground test surface

The reference ground plane for the visual field test is a compacted or hard ground area with a slope of $(0 \pm 2)\%$: