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

GB/T 35205.7-2021

**Rough-terrain trucks - Safety requirements and verification -
Part 7: Longitudinal load moment systems**

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Standardization Administration**

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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 of Standardization Documents"

drafted:

This document is part 7 of GB/T 35205 "Safety Requirements and Verification of Off-road Forklifts": GB/T 35205 has issued the following

part:

--- Part 1: Telescopic boom forklifts;

--- Part 5: Connecting devices for telehandlers and integrated personnel work platforms;

--- Part 7: Longitudinal load moment system:

This document uses the translation method equivalent to ISO 10896-7:2016 "Off-Road Vehicle Safety Requirements and Verification Part 7: Longitudinal Loads"

Distance System":

The Chinese documents that have a consistent correspondence with the international documents normatively cited in this document are as follows:

---GB/T 4208-2017 Enclosure protection class (IP code) (IEC 60529:2013, IDT);

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

The following editorial changes have been made to this document:

--- In order to be consistent with the existing standard series, the name of the standard is changed to "Safety Requirements and Verification of Off-road Forklifts - Part 7: Longitudinal Loads"

Torque System":

Please note that some content of this document may be patented: The issuing agency of this document assumes no responsibility for identifying patents:

Introduction

With its unique structure and various attachments, off-road forklifts are capable of handling many different types of vehicles: As the domestic

The increase of wild forklift manufacturers and the strict access requirements of foreign countries to enter their market require the regulation of the R&D and manufacturing of off-road forklifts and their safety:

All requirements and verification requirements are put forward, so that the safety requirements and verification criteria of our country's off-road forklifts are in line with international standards:

GB/T 35205 aims to establish safety requirements and verification criteria for off-road forklifts: GB/T 35205 "Safety requirements and inspection of off-road forklifts

Certificate to publish the following parts:

--- Part 1: Telescopic boom forklifts: The purpose is to specify the safety requirements and verification of telescopic boom trucks:

--- Part 2: Rotary forklifts: The purpose is to specify the safety requirements and verification of rotary forklifts:

--- Part 3: Truck-carrying forklifts: The purpose is to specify the safety requirements and validation of truck-mounted forklifts:

--- Part 4: Additional requirements for lifting telescopic boom forklifts with freely swinging loads: The purpose is to stipulate that the hoisting can freely swing the load

Safety requirements and verification of additional requirements for telehandler trucks:

--- Part 5: Connecting devices for telehandlers and integrated personnel work platforms: The purpose is to specify telehandlers and

Safety requirements and validation of connected devices for integrated human work platforms:

--- Part 6: Inclined cab: The purpose is to specify the installation of tilting cabs in telehandlers and rotary forklifts:

Security Requirements and Verification:

--- Part 7: Longitudinal load moment system: The purpose is to specify the design,

Security requirements and verification methods:

Off-road forklift safety requirements and verification

Part 7: Longitudinal load moment system

1 Scope

This document specifies the design, safety requirements and

Authentication method: This document specifies that loading is performed in a stable position on a compacted, firm and level ground as defined by ISO 10896-1

Longitudinal Load Moment Indicator (hereinafter referred to as "LLMI") and Longitudinal Load Moment Controller (with

hereinafter referred to as "LLMC"):

This document does not apply to the following forklifts:

--- Truck-carrying forklifts as defined in ISO 20297-1;

--- Slewing telescopic forklifts as defined in ISO 10896-2:

This document deals with significant hazards, hazards, and misuse of the longitudinal load moment system for its intended use and for foreseeable conditions by the manufacturer:

Dangerous state or hazardous event:

This document does not cover risks due to lateral instability or risks due to forklift operation: vertical load

The load moment system does not have the function of alarming the overturning risk when the forklift is running:

This document does not apply to longitudinal load moment systems that have been manufactured prior to the publication of this document:

2 Normative references

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

documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to

this document:

GB/T 16855:1-2018 Safety-related parts of machinery safety control systems - Part 1: General rules for design (ISO 13849-1:

2015, IDT)

GB/T 26949:14-2016 Industrial Vehicle Stability Verification Part 14: Off-Road Telehandler (ISO 22915-

14:2010, IDT)

GB/T 35205:1-2017 Safety requirements and verification of off-road forklifts - Part 1: Telescopic boom forklifts (ISO 10896-1:

2012, IDT)

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

Safety requirements and verification - Part 1: Variable-reach trucks)

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

principles for design - Risk assessment and risk reduction)

IEC 60529 enclosure protection level (IP Code)

[Degrees of protection provided by enclosures (IP Code)]

3 Terms and Definitions

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

3:1

longitudinal load moment

The sum of the moments at the front end of the tipping axis (eg wheels, stabilizers) in the longitudinal plane generated by the load of the forklift, attachments and lifting gear: