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

GB/T 27544-2011

Industrial trucks -- Electrical requirements

工业车辆 电气要求

(English Translation)

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard uses the translation method identical with ISO 20898:2008 "industrial vehicle electrical requirements." Correspondence between the consistency of the standards of

international documents and normative references of the following documents.

GB 4208 housing protection (IP Code) (GB 4208-2008, IEC 60529:2001, IDT) GB/T 14472 Fixed capacitors for use in electronic equipment - Part 14. Sectional specification. electromagnetic interference suppression and power supply connected to the main network Then fixed capacitor (GB/T 14472-1998, idt IEC 60384-14:1993) GB/T 15706.2 Safety of machinery - Basic concepts, general principles for design - Part 2. Technical principles (GB/T 15706.2-2007, ISO 12100-2:2003, IDT) GB/T 16855.1 machinery safety control system relating to safety components - Part 1. General principles for design (GB/T 16855.1-2008, ISO 13849-1:2006, IDT) GB/T 17938 Industrial vehicle electric vehicle traction lead-acid battery Preferred voltages (GB/T 17938-1999, idt ISO 1044:1993) the standard proposed by China Machinery Industry Federation.

This standard by the National Standardization Technical Committee Vehicle (SAC/TC332) centralized.

1 Scope

This standard specifies the design and manufacture of self-propelled industrial vehicles (including with mast) and telescopic sport utility truck (see GB/T 6104-2005 3.1.3.1.8) and not greater than the rated traction tractor electrical requirements of 20000N.

This standard applies to the battery voltage of the vehicle in line with ISO 1044, and the additional requirements of the vehicle with the main power supply, see GB 5226.1-2008.

This standard does not apply to.

--- Vehicles in use in potentially explosive atmospheres;

--- And EMC related issues.

This standard will not repeat the relevant rules and technical methods and materials used in vehicle manufacturing industry requirements. Above can Reference ISO 12100-2.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB 5226.1-2008 Safety of machinery - Electrical machinery and electrical equipment - Part 1. General requirements (IEC 60204-1:2005, IDT) GB/T 16856.1-2008 Safety of machinery - Risk assessment - Part 1. Principles (ISO 14121-1:2007, IDT) ISO 1044 industrial vehicle electric vehicle traction lead-acid batteries Preferred voltages (Industrialtrucks-Lead-acidtractionbatteriesforelectrictrucks-Preferredvoltages) ISO 12100-2 Safety of machinery - Basic concepts, general principles for design - Part 2. Technical

principles (Safety of machinery - Basic concepts, general principles for design - Part 2. Technical principles) ISO 13849-1 Safety of machinery - Safety-related control system components - Part 1. General principles for design
(Safety of machinery - Safety-related parts of control systems - Part 1. General principles for design) EN 50272-3 Safety requirements for secondary batteries and battery installations Part 3. Traction batteries (Safety requirements for secondary batteries and battery installations - Part 3. Traction batteries) IEC 60384-14 Fixed capacitors for use in electronic equipment - Part 14. Sectional specification. Fixed electromagnetic interference suppression capacitors
(Fixed capacitors for use in electronic equipment - Part 14. Sectional specification. Fixed capacitors for electromagnetic interference suppression and connection to the supply mains) IEC 60529 protection provided by enclosures (IP code) (Degrees of protection provided by enclosures (IP Code)) IEC 60947-5-1 Low-voltage switchgear and control equipment Part 5-1. Control circuit devices and switching elements - Electromechanical control circuit device
(Low-voltage switchgear and control gear - Part 5-1. Control circuit devices and switching elements - Electromechanical control circuit devices)

3 Terms and Definitions

The following terms and definitions apply to this document.