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

GB/T 27693-2011

**Safety of industrial trucks -- Test methods for measuring noise
emissions**

工业车辆安全 噪声辐射的测量方法

(English Translation)

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Foreword

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

This standard EN12053:2001 A1.2008 "Safety of industrial vehicle noise emissions measurement methods," the technical content completely Consistent.

Correspondence between the consistency of the standards of international documents and normative references of the following documents.

--- Determination of sound power levels of noise sources reflecting plane free field engineering method GB/T 3767-1996 Acoustics sound pressure (ISO 3744:1994);

--- Declaration and verification of GB/T 14574-2000 Acoustics machinery and equipment noise emission values (ISO 4871:1996).

This standard made the following editorial changes.

--- Remove the EN12053:2001 A1.2008 in relation to the introduction of harmonized standards and EU directives;

--- Remove the EN12053:2001 A1.2008 Annex ZA (informative) and Annex ZB (informative).

The standard proposed by China Machinery Industry Federation.

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

centralized.

Introduction

This standard is a type C standard GB/T 15706.1 stipulated.

The standard range indicated in the dangerous contents covered. In addition, industrial vehicles should be consistent with GB/T 15706.1 About This standard does not have Provisions cover a variety of dangerous situations.

Common Criteria vehicle noise emissions and sound power level measured at the operator position already exists, but for some special applications, these Standard not be directly applied industrial vehicles. Therefore the drafting of this standard is necessary. The basic standards ISO 3744:1994 and ISO 11201.

1995 has been cited in this standard.

The standard deeper purpose is. no matter what type of industrial vehicles, and the like are available to typical noise emission of information.

This information should be measured and verified. This requires defining the working conditions and the typical time characteristics.

Industrial vehicles idle condition (IDLE) is included, because. The state is the state of the vehicle is typically a low noise emissions, lower vehicle Noise radiation conditions including drops, tilt, load handling, slow motion and two operations wait.

Evaluation of sound power levels commonly used assay envelope surface, in the vehicle running state with six or more microphones measuring point, have the when the big technical difficulty. Then a large number of comparison can be found, with the recommended four microphones spotting method to obtain the final result Results with six or more microphones measuring points obtained in the deviation value is very small, so the recommended four microphones spotting Party Method is feasible.

However, the test results do not apply to the noise at the operator position.

Measurement of noise radiation safety of industrial vehicles

1 Scope

This standard specifies the industrial vehicles (including off-road vehicle) measurement operator position sound pressure level and sound power level.

Type tests specified in this standard apply to all listed in Table A.1 industrial vehicles.

According to the test results of this standard test, the vehicle can also be used to assess the degree of harm to the industrial noise released.

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/T 6104-2005 powered industrial trucks terminology (ISO 5053. 1987) GB/T 15706.1-2007 Safety of machinery - Basic concepts, general principles for design - Part 1. Basic terminology, methodology (ISO 12100-1:2003) GB/T 17248.2-1999 Acoustics machinery and equipment noise emission and other operating position emission sound pressure levels specified location Measuring a reflecting plane free field Engineering method (ISO 11201:1995) ISO 3744:1994 Acoustics Determination of sound pressure of sound power levels of noise sources reflecting plane free field engineering method (Acoustics-Determination of sound power level of noise sources using sound pressure-Engineering method in an essentially free field over a reflecting plane)

1996 Declaration and verification of acoustic noise emission values of machinery and equipment of (Acoustics-Declaration and verification of noise emission values of machinery and equipment) ISO 11201:1995 Acoustics machinery and equipment noise emission and other operating positions specified position measuring emission sound pressure levels A reflecting plane free field engineering method (Acoustics-Noise emitted by machinery and equipment-Measurement of emission sound pressure levels at a workstation and at other specified positions-Engineering method in an essentially free field over a reflecting plane) EN1459 industrial vehicle safety self-propelled telescopic handler (Safety of industrial trucks-Self-propelled variable reach trucks) EN1525 industrial vehicles unmanned vehicles and their safety systems (Safety of industrial trucks-Driverless trucks and their system) EN1551 safety rated for industrial vehicles weighing more than 10000kg self-propelled vehicle (Safety of industrial trucks-Self-propelled truck over 10000kg capacity) EN1726-1 industrial safety rated vehicle weight to (including) the self-propelled vehicle and traction to 10000kg (including) 20000N Towing vehicles - Part 1. General requirements (Safety of industrial trucks-Self-propelled trucks up to and including 10000kg capacity and industrial tractors with a drawbar pull up to and including 20000N-Part 1. General requirements) EN1726-2 Safety of industrial vehicles rated load to (including) 10000kg self-propelled vehicles and traction to (including) 20000N Additional requirements for console and can lift vehicles with specially designed lifting load operation of the vehicle. towing vehicles - Part 2 (Safety of industrial trucks-Self-propelled trucks up to and including 10000kg capacity and tractors with a drawbar pull up to and including 20000N-Part 2. Additional requirements for trucks with the