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

GB/T 8420-2011

Replacing GB/T 8420-2000

**Earth-moving machinery -- Physical dimensions of operators
and minimum operator space envelope**

土方机械 司机的身材尺寸与司机的最小活动空间

(English Translation)

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Table of Contents

Foreword

Introduction

1 Scope

2 Normative references

3 Terms and Definitions

Foreword

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

This standard replaces GB/T 8420-2000 "moving machinery physical dimensions of operators and minimum space." This standard GB/T 8420-2000 compared to, in addition to editorial changes outside the main technical changes are as follows.

- Increased introduction;
- Range is not limited to the male driver;
- Remove the "driver stature percentile" in graph (see Figure 1 edition 2000);
- Modify the terms and definitions (see Chapter 3, Section 3 of the 2000 edition);
- Revised Figure 1, Figure 2, Figure 3 tables of values (Figures 1, 2, 3, 2000 edition of the Table 1, Table 2, Table 3);
- Modified Figures 4, 5 (Figures 4 and 5, 2000 edition of FIGS. 5 and 6);
- "From the SIP to the cab side wall minimum distance" from the 335mm adjustment of 325mm (see 523, 2000 edition 5.4.);
- Deleted provisions earthmoving machinery comfort and handling device manipulation region and may range (see 2000 edition of Appendix A).

This standard uses the translation method identical with ISO 3411:2007 "minimum activity moving machinery physical dimensions of operators and air between".

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

- GB/T 8591-2000 "moving machinery - Seat index point" (eqv ISO 5353:1995);
- GB/T 8498-2008 "earth-moving machinery - Basic types - Identification and terms and definitions" (ISO 6165:2006, IDT);

--- GB/T 25624-2010 "moving machinery - Seat dimensions and requirements" (ISO 11112:1995, IDT).

The standard proposed by China Machinery Industry Federation.

This standard by the national earthmoving machinery Standardization Technical Committee (SAC/TC334) centralized.

This standard was drafted. Tianjin Institute of Mechanical Engineering, Guangxi Liugong Machinery Co., Ltd, Rongsheng Machinery Co., Ltd, Shaanxi Tongli Heavy Industries Co., Ltd., Hill redevelopment Machine Co., Ltd.

Introduction

The standard size is based on US driver (CAESAR data), Europe (ISO 15534-3:2000) and Asia (China, Japan, South Korea and Thailand) male and female data obtained.

Asian male driver of the size of the data within the range of 5% to 95% of the joint US and European data. Therefore, as the representative of the United States and Europe the driver population, the driver is based on the size of the data derived from the above two regions. To calculate the potential growth of Asian female driver from the previous version it retains the value of the diminutive size of the driver, rather than the United States and Europe tall driver data.

Dimensions specified in this standard is worth the actual measurements listed above that, when unable to obtain a specific size, can be obtained based on the measurement scale Growth trends inch from a previous version of a proportion worth.

This standard specifies the minimum driver's normal activities within a specific earthmoving machinery space can be added or modified.

Moving machinery - Human physical dimensions Operators and minimum space

1 Scope

This standard specifies the physical dimensions as defined in ISO 6165 and moving machinery used in the normal operation of the driver space minimum Space range.

This standard does not apply to this standard prior to the implementation of the manufacturing machine.

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.

ISO 5353 Earth-moving machinery - Seat index point (Earth-moving machinery, and tractors and machinery for agriculture and forestry - Seat index point) ISO 6165 Earth - moving machinery - Basic types - Identification and terms and definitions (Earth-moving machinery - Basic types - Identification and terms and definitions) ISO 11112 moving machinery - Seat size and requirements (Earth-moving machinery - Operator's seat - Dimensions and requirements)

3 Terms and Definitions

The following terms and definitions apply to this document.

Short stature drivers small operator in moving machinery worldwide, about 5% shorter than listed driver's body size.

Average driver medium operator in moving machinery worldwide, about 50 percent shorter than the drivers listed in physical dimensions, higher than the rest of the drivers listed in the body Timber size.

Tall stature drivers large operator in moving machinery worldwide, about 5% higher than the drivers listed in physical dimensions.

Working posture the driver posture at work.

Upright posture erect posture Without backrest upright standing or sitting.