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

GB/T 19930.2-2014

**Earth-moving machinery -- Laboratory tests and performance
requirements for protective structures of excavators -- Part 2:
Roll-over protective structures (ROPS) for excavators of over 6 t**

土方机械 挖掘机保护结构的实验室试验和性能要求 第2部分：6t以上挖掘机的滚
翻保护结构(ROPS)

(English Translation)

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Foreword

GB/T 19930 "Laboratory tests and performance requirements for protective structures of excavators earthmoving machinery" is divided into two parts.

--- Part 1. Mini excavator rollover protection structure (TOPS);

Note: The current standard number and the name of the standard part of GB/T 19930-2005 "Laboratory tests earthmoving machinery mini excavator rollover protection structures and Performance requirements ", until the revised standard, the standard number to GB/T 19930.1.

--- Part 2. ROPS above 6t excavators (ROPS).

This section GB/T 19930 Part 2.

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

This section uses the translation method identical with ISO 12117-2:2008 "Laboratory tests and performance earthmoving machinery excavators protective structures to Partial Evaluation 2. ROPS above 6t excavators (ROPS) ", including Technical Corrigendum ISO

12117-2:2008/Cor.1.2010.

Consistency correspondence between this part of international documents and normative references of our files are as follows.

- GB/T 8498-2008 moving machinery - Basic types - Identification and terms and definitions (ISO 6165:2006, IDT)
- GB/T 8591-2000 moving machinery - Seat index point (eqv ISO 5353:1995)
- GB/T 21153-2007 moving machinery size, performance and parameters of units and the measurement accuracy (ISO 9248:1992, MOD) this part of ISO 12117-2:2008 as compared to, do the following editorial changes.
- 6.3.2 of the "Figure 10" to "see Fig. 10a)";
- 6.4.4 in the "Table 1" to "Table 2";
- Remove the relevant international standards imperial state's "Note 1. In some countries with English, using the same bolts and nuts Level "and" Note 2 "to" note ";
- Technical errata content into standard text, and the text in the margin by a vertical wire "|" logo.

This part is proposed by China Machinery Industry Federation.

This part of the National earthmoving machinery Standardization Technical Committee (SAC/TC334) centralized.

This section is drafted. Tianjin Institute of Mechanical Engineering, Shanghai Sany Heavy Machinery Co., Ltd., Xiamen City Product Quality Supervision and Inspection Institute [National Field (plant) in the motor vehicle Quality Supervision and Inspection Center], Xiamen, Xiamen Engineering Machinery Co., Ltd., Xuzhou Bohui Cab Manufacturing Co., Ltd., Jilin Engineering Equipment Experimental Center Forest University, Shenyang and Hong Electrical and Mechanical Equipment Co., Ltd., Xiamen Engineering Machinery Co., Ltd. Yuming.

Introduction

Since the hydraulic excavator began tipping their work may support a larger body, so unlike other hydraulic excavators earthmoving machinery a Like easy tipping. However, in some of the world countries in the region, the accident data show that the hydraulic excavator need ROPS. Therefore, it is necessary ROPS for hydraulic excavator for standardization.

This section GB/T 19930 for earthmoving machinery 6t above hydraulic excavator ROPS (ROPS) provides a test method. Unlike properties GB/T 17922 stipulated machinery, hydraulic excavator with a large working device which may be necessary for the impact of ROPS performance. In addition, test methods and performance requirements for hydraulic

excavators ROPS and other earth-moving machinery is different.

Laboratory earthmoving machinery excavators protective structures Tests and performance requirements - Part 2. 6t more ROPS excavator (ROPS)

1 Scope

This section GB/T 19930 established under static load uniform, repeatable evaluation ROPS (ROPS) load bearing the method by performance, and provides for typical specimen performance requirements under such loads.

This section applies to more than 6t and less than 50t hydraulic excavator ROPS ISO 6165 requirements. When the machine is turning around its back Rack longitudinal axis of the roll 360 °, and less than 30 ° slope of hard clay surface without losing contact with, ROPS driver seat belt system will indeed Paul minimal squeeze protection space. ROPS roll has been used in the presence of dangerous places.

This section applies to basic or excavator for lifting objects, remove the disk or tape, clamshell bucket, grab or claw fixture subsidiary Derived excavator means ROPS.

This section does not apply to the lifting device with a driver's cab of the excavator.

Note: Due to experimental and statistical data from the acceptable reference, this section applies to the overall quality of work is expected to be less than or equal to 50000kg excavators. Do not Exclude the possibility excavator procedure described in this section applies to a greater or lesser quality, if this requirement may result in unrealistic design, not Including excavators used in mining conditions special design.

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 17772-1999 laboratory identification limit the amount of deflection of the protective structure moving machinery requirements (idt ISO 3164:1995) ISO 5353 Earth-moving machinery and tractors and machinery for agriculture and forestry - Seat index point (Earth-movingmachinery, and tractorsandmachineryforagricultureandforestry-Seatindexpoint) ISO 6165 Earth - moving machinery - Basic types - Identification and terms and definitions (Earth-movingmachinery-Basictypes-Identificationandtermsanddefinitions) Units and Measurements accuracy ISO 9248 Earth-moving machinery size, performance and parameters (Earth-movingmachinery-Unitsfordimensions, performanceandcapacities, andtheirmeasurementaccuracies)

3 Terms and Definitions

The following terms and definitions apply to this document.

Attachment for specific purposes, parts installed on the host device or assembly work.

[GB/T 21154-2014, the definition 3.1.4] 3.2 Floor bedplate Test fixture frame when the test completely rigid parts.