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

GB/T 13332-2008

Replacing GB/T 13332-1991

**Earth-moving machinery -- Hydraulic excavators and backhoe
loaders -- Methods of determining tool forces**

土方机械 液压挖掘机和挖掘装载机 挖掘力的测定方法

(English Translation)

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Foreword

This standard is identical with ISO 6015:2006 "moving machinery - Hydraulic excavators and backhoe loaders determination Digging Force" (English Chinese Version).

This standard is equivalent translation ISO 6015:2006.

For ease of use, this standard made the following editorial changes.

--- "This International Standard" be replaced by "this standard";

--- Deleted international standards foreword;

--- To ISO 6015:2006 international standard referenced with the international standard has been adopted as the standard instead of the corresponding country.

This standard replaces GB/T 13332-1991 "Hydraulic excavators Test Method." this standard compared with GB/T 13332-1991, the main changes are as follows.

--- Standard name from "Hydraulic excavators Test Method" to "earth-moving machinery - Hydraulic excavators and backhoe loaders dig Determination of "digging force";

--- Standard English name was modified accordingly;

--- Increasing the standard preface;

--- According to Chapter 4, "determination" of the contents of the provisions have been rearranged;

--- Increased Chapter 5, "Calculation Method" and Chapter 6, "Verifying rated digging force and closing force." 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, Xuzhou Excavator Manufacture Co., Ltd., Xiamen, Xiamen Engineering Machinery Co., Ltd.

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1 Scope

This standard specifies the method for determination of digging force hydraulic excavators and backhoe loaders.

This standard applies to GB/T 8498 defined hydraulic excavators and backhoe loaders.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 6572.1 Hydraulic excavators - Terminology (GB/T 6572.1-1997, eqv ISO 7135:1993)
GB/T 8498 Earth - moving machinery - Basic types - Identification and terms and definitions (GB/T 8498-2008, ISO 6165:2006, IDT) Definition of GB/T 18577.1 moving machinery dimensions and codes - Part 1. Host (GB/T 18577.1-2008, ISO 6746-1:2003, IDT) GB/T 21153 moving machinery size, performance and parameters of units and the measurement accuracy (GB/T 21153-2007, ISO 9248.

1992, MOD)

GB/T 21154 earthmoving machinery machine and method for measuring the quality of the work equipment and components (GB/T 21154-2007, ISO 6016:1998, IDT) GB/T 21941 moving machinery - Hydraulic excavators and backhoe loaders backhoe and grab bucket capacity Calibration (GB/T 21941-2008, ISO 7451:2007, IDT) GB/T 21942 moving machinery - Loaders and shovel bucket capacity Calibration (GB/T 21942-2008, ISO 7546. 1983, MOD)

3 Terms and Definitions

The following terms and definitions apply to this standard.

Alone operation or the bucket cylinder arm cylinder, bucket or cutting edge at the leading edge, not in force at the tip of the bucket teeth produced.

In the arm cylinder is placed in force with respect to the arm pin has a rotational torque, the front edge of the bucket produced.

Note: When using the backhoe bucket to move the leading edge to the host direction.

when the bucket posture is horizontal and parallel to the ground plane and the ground plane is located in the leading edge of the bucket when the front edge of the bucket arm solution Pressure cylinder action arising under the arm cylinder horizontal digging force.

Bucket digging force of the bucket cylinder in which a pin having a relative rotational torque when the bucket leading edge generated.

Note: When using the backhoe bucket to move the leading edge to the host direction; when using shovel means, away from the front edge of the bucket host direction.

GB/T 13332-2008/ISO 6015:2006