## INTERNATIONAL STANDARD

ISO 8812

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# Earth-moving machinery — Backhoe loaders — Definitions and commercial specifications

Engins de terrassement — Chargeuses-pelleteuses — Définitions et spécifications commerciales



#### **Foreword**

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 8812 was repared by Technical Committee ISO/TC 127, Earth-moving machinery, Subcommittee SC 4, Commercial nomencature, classification and rating.

Annex A forms an integral part of this International Standard.

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### Earth-moving machinery — Backhoe loaders — Definitions and commercial specifications

#### 1 Scope

This International Standard establishes terminology and the content of commercial literature specifications for self-propelled crawler or wheeled backhee loaders and their equipment.

This International Standard is applicable to backhoe loaders as defined in 3.1. It is not applicable to loaders equipped with a backhoe attachment in accordance with JSO 7131:1997, 3.3.1.

#### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 3450:1996, Earth-moving machinery — Braking system of rubber-tyred machines — Systems and performance requirements and test procedures.

ISO 4250-1:1996, Earth-mover tyres and rims — Part 1: Tyre designation and dimensions.

ISO 4250-2:1995, Earth-mover tyres and rims — Part 2: Loads and inflation bressures.

ISO 4250-3:1997, Earth-mover tyres and rims — Part 3: Rims.

ISO 5010: 1992, Earth-moving machinery — Rubber-tyred machines — Steering requirements.

ISO 6014:1986, Earth-moving machinery — Determination of ground speed.

ISO 6015:1989, Earth-moving machinery — Hydraulic excavators — Methods of measuring tool forces.

ISO 6016:1998, Earth-moving machinery — Methods of measuring the masses of whole machines, their attachments and components.

ISO 6165:1997, Earth-moving machinery — Basic types — Vocabulary.

ISO 6746-1:1987, Earth-moving machinery — Definitions of dimensions and symbols — Part 1: Base machine.

ISO 6746-2:1987, Earth-moving machinery — Definitions of dimensions and symbols — Part 2: Equipment.

ISO 7131:1997, Earth-moving machinery — Loaders — Terminology and commercial specifications.

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ISO 7135:—1), Earth-moving machinery — Hydraulic excavators — Terminology and commercial specifications.

ISO 7451:1997, Earth-moving machinery — Volumetric ratings for hydraulic excavator buckets and backhoe loader buckets.

ISO 7457:1997, Earth-moving machinery — Determination of turning dimensions of wheeled machines.

ISO 7546:1983, Earth-moving machinery — Loader and front loading excavator buckets — Volumetric ratings.

ISO 9249:1997, Earth-moving machinery — Engine test code — Net power.

ISO 14397-1:—<sup>2)</sup>, Earth-proving machinery — Loaders and backhoe loaders — Part 1: Calculation and verification methods for operating loads.

#### 3 General definitions

See also ISO 6165.

#### 3.1

#### backhoe loader

self propelled crawler or wheeled machine, having a main frame designed to carry both front-mounted equipment and rear-mounted backhoe equipment (normally with outriggers); when used in the backhoe mode, the machine is stationary and normally digs below ground level; when used in the loader mode (bucket use), the machine loads through forward motion

NOTE 1 A backhoe work cycle normally comprises excavating, elevating, swinging, and discharging material. A loader work cycle normally comprises filling, elevating, transporting, and discharging material.

NOTE 2 Backhoe loader directional references: the terms right, front or rear are determined from the operator's position when seated in the travelling direction stated by the manufacturer.

#### 3.2

#### base machine

machine with, if required, cab, canopy and operator-protective structures, without equipment or attachments, but including the mountings necessary to connect equipment or attachments.

NOTE For the purposes of this International Standard, the base machine backhoe loader includes equipment and attachments.

#### 3.3

#### equipment

set of components mounted onto the base machine which allow an attachment to perform its primary design function

#### 3.4

#### optional equipment

optional items of equipment mounted onto the base machine to increase, for example, capacity, flexibility, comfort and safety

2

<sup>1)</sup> To be published. (Revision of ISO 7135:1993)

<sup>2)</sup> To be published.