

Terminology (including definitions of dimensions and symbols) for earth-moving machinery —

Part 6: Terminology and commercial specifications for self-propelled crawler and wheel tractors and their equipment

ICS 01.040.53; 53.100

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National foreword

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The UK participation in its preparation was entrusted by Technical Committee B/513, Construction equipment and plant, and site safety, to Subcommittee B/513/1, Earth-moving machinery (International), which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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Cross-references

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the ISO title page, pages ii to iv, pages 1 to 30 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

This British Standard, having been prepared under the direction of the Sector Committee for Building and Civil Engineering, was published under the authority of the Standards Committee and comes into effect on 15 January 1999

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INTERNATIONAL STANDARD

**ISO
6747**

Third edition
1998-10-01

Earth-moving machinery — Tractor- dozers — Terminology and commercial specifications

*Engins de terrassement — Bouteurs — Terminologie et spécifications
commerciales*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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 6747 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 4, *Commercial nomenclature, classification and rating*.

This third edition cancels and replaces the second edition (ISO 6747:1988), of which it constitutes a technical revision.

Annex A forms an integral part of this International Standard.

Descriptors: Site equipment, earth-moving equipment, tractors, technical data sheets, vocabulary.

1 Scope

This International Standard establishes terminology and the content of commercial literature specifications for self-propelled crawler and wheeled tractor-dozers and their equipment. It is applicable to tractors-dozers for earth-moving machinery as defined in ISO 6165.

NOTE Figure 1, Figure 10, Figure 11, Figure 12, Figure 17, Figure 21, Figure 23, Figure 24, Figure 25, Figure 26, Figure 30 and the figures in Annex A do not show the GRP in the correct location according to Figure 19.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of ISO and IEC maintain registers of currently valid International Standards.

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

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

ISO 6016:1998, *Earth-moving machinery — Methods of measuring the masses of whole machines, their equipment 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 7457:1997, *Earth-moving machinery — Measurement of turning dimensions of wheeled machines.*

ISO 7464:1983, *Earth-moving machinery — Method of test for the measurement of drawbar pull.*

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

ISO 10265:1998, *Earth-moving machinery — Crawler machines — Performance requirements and test procedures for braking systems.*

ISO 10266:1992, *Earth-moving machinery — Determination of slope limits for machine fluid systems operation — Static test method.*

3 Definitions

For the purpose of this International Standard, the following definitions apply.

NOTE For definitions reproduced or adapted from other International Standards, the definition given in the most recent edition of that International Standard applies.

3.1 General

3.1.1

tractor-dozer

self-propelled crawler or wheeled machine with equipment having either a dozing attachment which cuts, moves and grades material through forward motion of the machine, or a mounted attachment used to exert a push or a pull force [ISO 6165:1997]

NOTE See Figure 1 and Figure 2.

3.1.2

base machine

machine without equipment as described by the manufacturer's specifications

NOTE The machines should be provided with the necessary mountings to secure equipment as defined in 3.1.6.

3.1.3

equipment

set of components mounted on the base machine to fulfil the primary design function

3.1.4
attachment

assembly of components that can be mounted on the base machine for a specific use

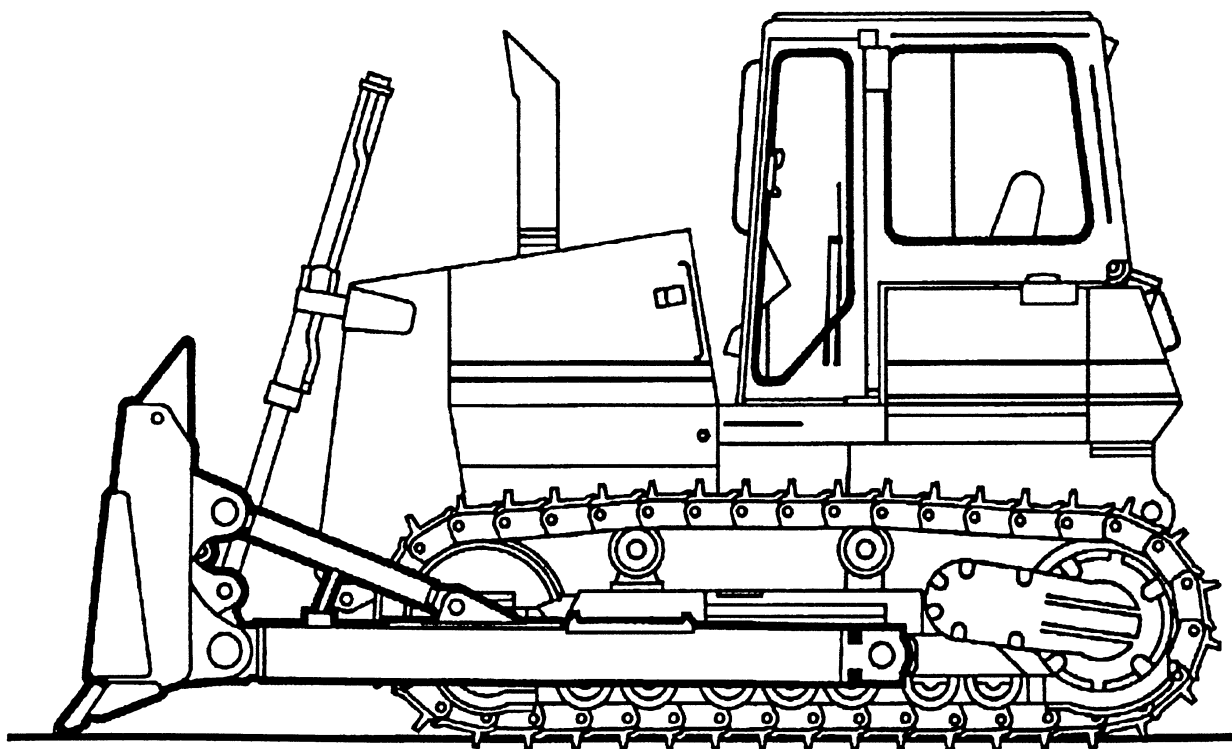


Figure 1 — Crawler-type tractor-dozer

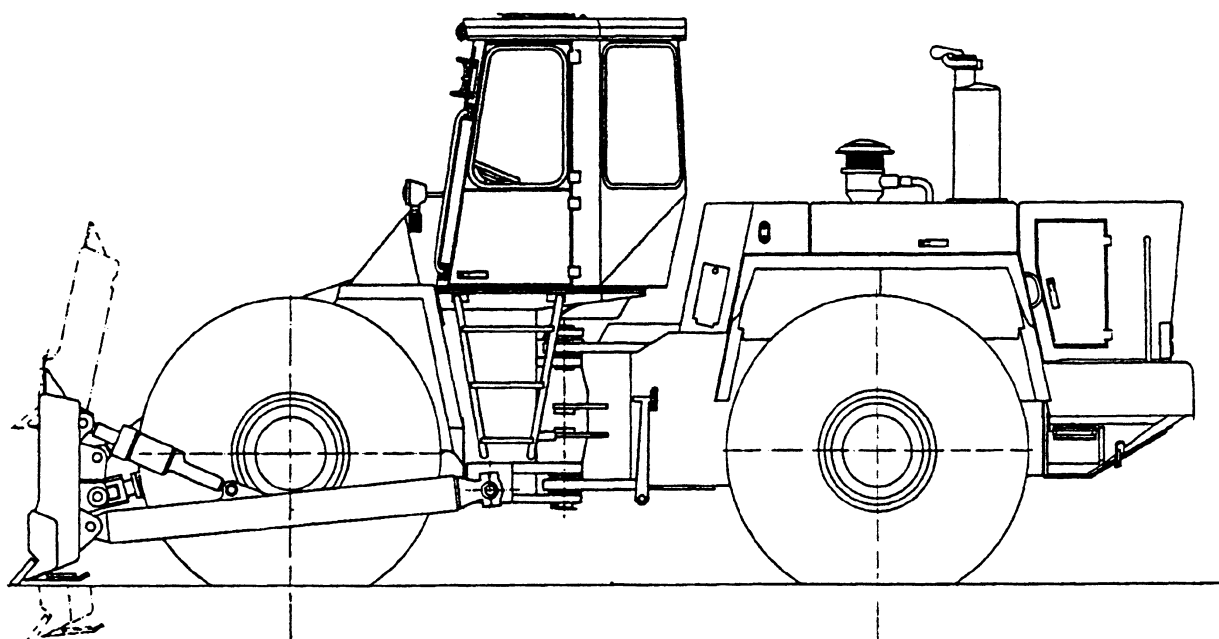


Figure 2 — Wheel-type tractor-dozer

3.1.5**component**

part or an assembly of parts of a base machine, equipment or an attachment

3.1.6 dozing equipment

front blade and its frame and relevant positioning devices

3.1.6.1**straight dozer**

dozer where the blade is maintained in a position where the cutting edge is parallel to an *X* plane

NOTE See Figure 3.

3.1.6.2**angle dozer**

dozer where the blade position may be changed so that the cutting edge is at an angle to an *X* plane

NOTE See Figure 4.

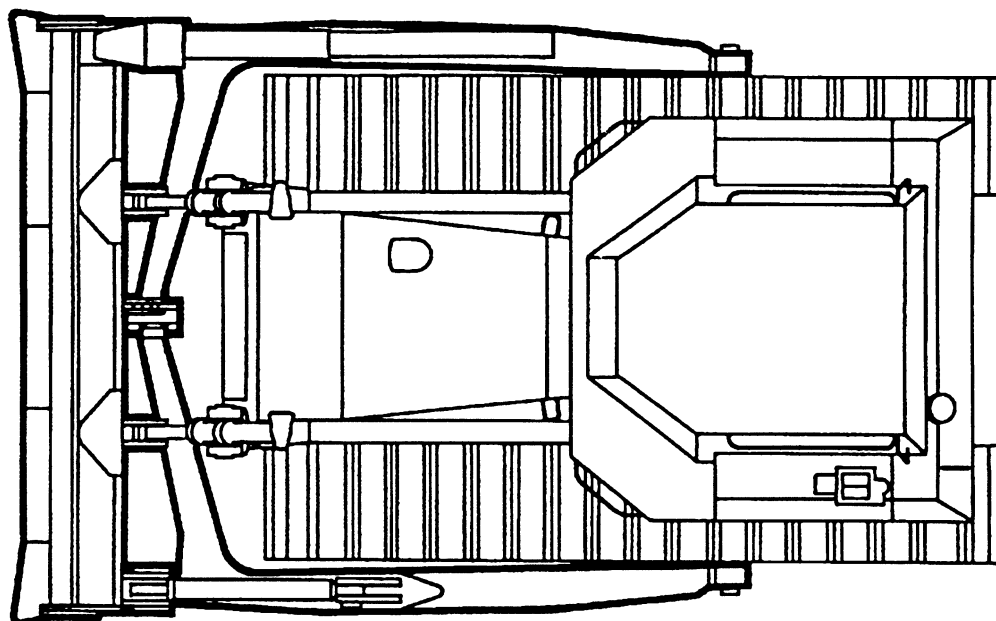


Figure 3 — Crawler tractor with straight dozer

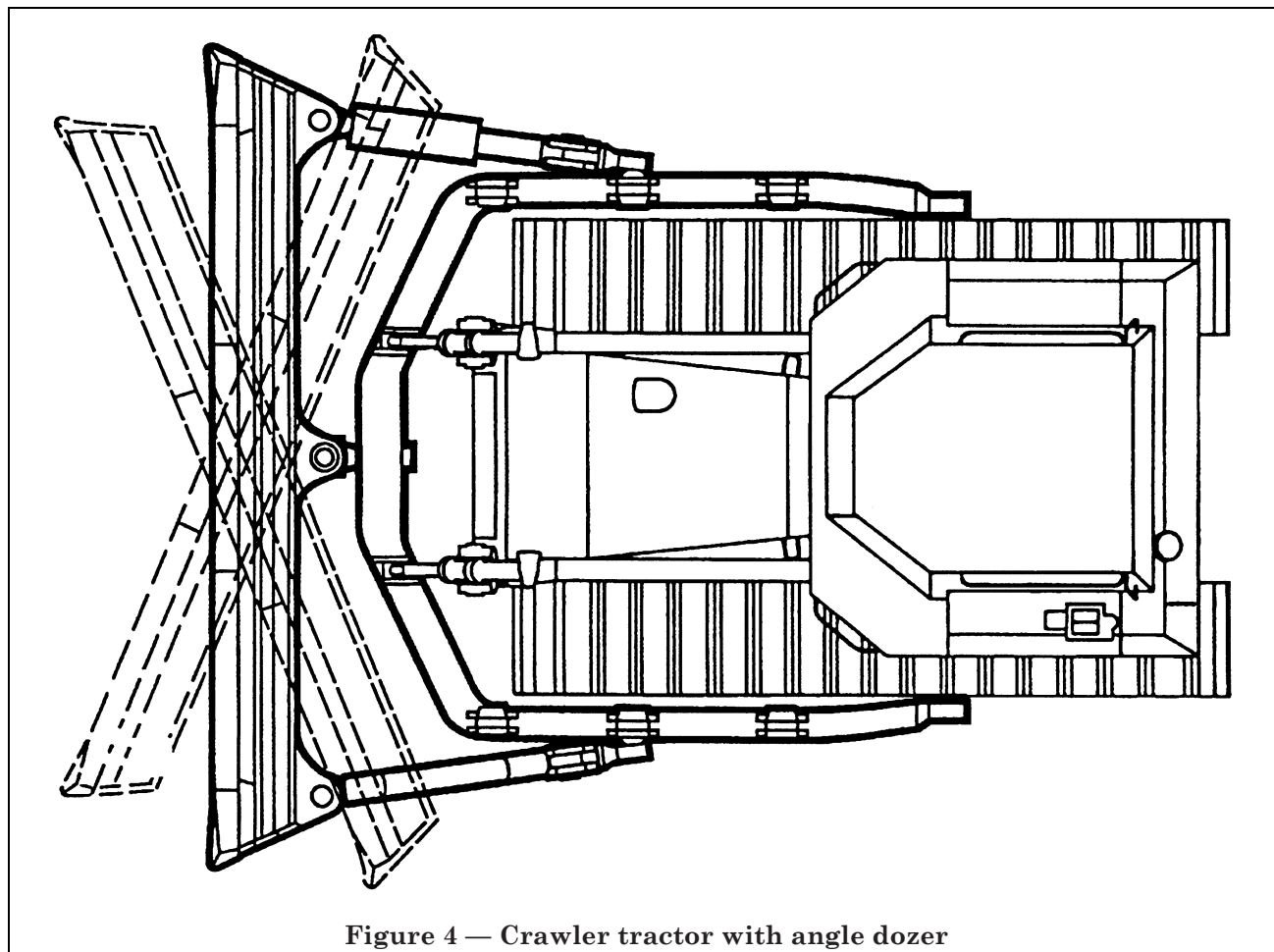


Figure 4 — Crawler tractor with angle dozer

3.1.6.3 tilt and pitch

type of movement of the blade of a straight dozer or angle dozer

NOTE Blade operation is by hydraulic control where the operation is performed by means of a hydraulic system.

3.1.6.3.1

tilt movement

blade movement in which the position of the blade may be changed so that the cutting edge is at an angle to a Z plane

NOTE See Figure 5.

3.1.6.3.2

pitch movement

blade movement in which the upper portion of the blade may be changed in angle by pivoting it around a line parallel to the cutting edge

NOTE See Figure 6.