

Glossary of

Terms and classification relating to agricultural machinery and implements —

Part 1: Power and tractive units

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Committees responsible for this British Standard

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- British Agricultural and Garden Machinery Association Ltd.
- Intermediate Technology Development Group
- Local Authority Organizations
- Ministry of Agriculture, Fisheries and Food
- National Farmers' Union
- Royal Agricultural College
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- Scottish Centre for Agricultural Engineering (SCAE)
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Foreword

BS 2468-1:1994 has been prepared under the direction of the Agricultural Machinery and Implements Standards Policy Committee.

This Part of BS 2468 supersedes those clauses of BS 2468:1963 which relate to power and tractive units. When the revision of BS 2468 is complete it is envisaged that it will consist of the following Parts and BS 2468:1963 will be withdrawn:

- *Part 1: Power and tractive units;*
- *Part 2: Equipment for land reclamation;*
- *Part 3: Soil working equipment¹⁾;*
- *Part 4: Equipment for sowing and planting;*
- *Part 5: Equipment for applying fertilizers, soil conditioners and water;*
- *Part 6: Equipment for plant care and protection;*
- *Part 7: Equipment for harvesting;*
- *Part 8: Post-harvesting equipment;*
- *Part 9: Equipment for handling, transport and storage;*
- *Part 10: Equipment for livestock production;*
- *Part 11: Miscellaneous farmstead equipment;*

The classification used in this revision of BS 2468 is similar to that used in ISO 3339-0 *Tractors and machinery for agriculture and forestry — Classification and terminology — Part 0 Classification system and classification*.

BS 2468:1963 was drawn up with a view to standardizing the vocabulary used to describe agricultural tractors and machinery, and the foreword stated that the need arose from “the very prevalent use of synonyms, some often purely local in origin and application . . .”

The contents of BS 2468:1963 are now seriously out of date, and the need for consistent terminology has increased. The International Organization for Standardization Committee ISO/TC 23/SC 1 has begun work on a classification of terminology for agricultural and forestry tractors and machinery, but progress has been slow, and to date only the classification (ISO 3339-0) has been published.

Meanwhile, the use of computer information services relying on keywords for searching is increasing, and trade with the rest of Europe is set to expand following the removal of trade barriers in 1992. For both these applications, a standard terminology for agricultural machinery and implements is urgently required. Within education too, an up-to-date vocabulary is sorely needed, and it has been decided to continue with a revision of the British Standard without waiting for the rest of ISO 3339, but using the existing classification as a framework for grouping terms.

The terminology used in this Part is based on what is believed to be current usage in UK agriculture, horticulture and forestry, but also takes into account terminology used in government regulations and British and International Standards in these and related fields. The documents referred to are listed in the bibliography in Annex A.

The term machine is used wherever there is a drive into the device from the tractor or power unit power take-off, e.g. power take-off driven rotary cultivator is a machine. The term implement is used where there is no drive into the device or where the drive is obtained from soil contact, e.g. disc harrow.

¹⁾ In preparation.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 30, an inside back cover 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.

Section 1. General

1.1 Scope

This Part of BS 2468 describes the terminology and definitions used in relation to power and tractive units employed in agriculture, horticulture, forestry, and related industries but it excludes forestry equipment for harvesting and transport.

Although the classification is similar to that used in ISO 3339-0:1986, details of some of those items have been omitted because they were considered not to be in general use in the UK. These items are marked with an asterisk(*). Some general definitions have also been included although these are not part of ISO 3339-0:1986.

1.2 Informative references

This Part of BS 2468 refers to other publications that provide information or guidance. Editions of these publications current at the time of issue of this standard are listed on the inside back cover but reference should be made to the latest editions.

1.3 Guidance on the structure and use of the glossary

1.3.1 Term number and classification system

Each term is given a unique reference to its place in the glossary by means of an alphanumeric term number. This term number is based on the numeric classification system developed for agricultural and forestry tractors and machinery in ISO 3339-0:1986. In this ISO system the initial grouping of terms is made according to the primary processing function. This primary grouping is divided into 11 classes which are designated by a two digit number 01 through to 11 and which correspond to the Parts of this standard as follows.

Class 01: Power and tractive units

Class 02: Equipment for land reclamation

Class 03: Equipment for working the soil

Class 04: Equipment for sowing and planting

Class 05: Equipment for applying fertilizers, soil conditioners and water

Class 06: Equipment for plant care and protection

Class 07: Equipment for harvesting

Class 08: Post-harvesting equipment

Class 09: Equipment for handling, transport and storage

Class 10: Equipment for livestock production

Class 11: Miscellaneous farmstead equipment

Each of these primary classes is divided into subclasses up to a maximum of 9 which are designated by a single digit separated from the primary class number by a point marker. Further subdivisions are made as required by the addition of one or two digit numbers separated by point markers from the previous subclass.

However, because of the limitations of the ISO system, particularly in relation to UK usage and terminology, it was agreed for the purposes of the UK glossary to use the ISO classification only to the third level, i.e. class, subclass and first subdivision. Thereafter, and where the UK terminology differs, this difference in classification is shown by the use of a capital letter with point markers in alphabetical order in place of the ISO numeric subdivision, where required. Subsequent subdivisions revert to numeric digit(s) separated by point markers, as required.

A subclass 0, which does not exist in the ISO system, has also been introduced to cover general definitions. The construction of the term number is shown diagrammatically below.

BS term	BS term number				ISO term
Spark ignition engine	—	—	01.	1.	None
Class 1: Power & tractive units (Part 1)					Power & tractive units
Subclass: Power units					Power units (engines)
Subdivision: Internal combustion engine					Internal combustion engine
Machine type: Spark ignition engine					None
				2	Petrol (gasoline)
				3	Paraffin
				4	Liquified petroleum gas (LPG)

NOTE No further subdivisions are covered in the British Standard.

1.3.2 Classification scheme

Table 1 in section 2 lists terms in classification order using the BS term number, see column 1. This is followed by the UK term in column 2 and, where this is different, the equivalent ISO term follows in brackets.

An asterisk against the term indicates that the term is listed in the ISO classification but is not in common usage in the UK and has therefore not been defined in this glossary.

Where there is an equivalent ISO classification number it is listed in the final column.

1.3.3 Terminology

In section 3 definitions of terms in UK usage are given in classification order. Notes and figures, where given, provide additional information but do not form part of the definition of a term. Words that are defined elsewhere in the same document are italicized when they appear in a definition unless they are used in a dictionary sense rather than as a specialized agricultural term.

Deprecated terms and abbreviations are given below the preferred term along with their status. They are not separately numbered but are all listed in the index with a reference to the preferred term number.

In most cases, terms are defined in the singular, even when the plural form is the more common. However, where items always occur in pairs the plural form is used.

1.3.4 Index

Terms are listed alphabetically in the index and are followed by the term number. Deprecated terms and abbreviations are given but are listed with a reference to the preferred term number.

Section 2. Classification scheme

Table 1 — List of terms in classified order

British Standard term number	Term (* indicates term not defined in this British Standard)	ISO 3339-0 class number
01	Power and tractive units	01
01.0	General definitions	—
01.0.01	Agricultural motor vehicle	—
01.0.02	Front	—
01.0.03	Gross weight	—
01.0.04	Unladen weight	—
01.0.05	Axle weight	—
01.0.06	Power source	—
01.0.07	Turbocharger	—
01.0.08	Intercooler	—
01.0.09	Maximum speed	—
01.0.10	Braking efficiency	—
01.0.11	Hydrostatic transmission	—
01.0.12	Hydrokinetic transmission	—
01.0.13	Attachment	—
01.0.14	Guard	—
01.0.15	Reversible driving position	—
01.1	Power units [ISO Engines]	01.1
01.1.01	External combustion engine*	01.1.01
01.1.02	Internal combustion engine	01.1.02
01.1.02.A	Compression ignition engine	—
01.1.02.B	Spark ignition engine	—
01.1.03	Electric motor	01.1.03
01.1.03.A	Direct current motor	01.1.03.1
01.1.03.B	Alternating current motor	01.1.03.2
01.1.03.C	Linear motor	01.1.03.3
01.1.04	Hydraulic motor	01.1.04
01.1.04.A	Gear type motor	01.1.04.1
01.1.04.B	Vane type motor	01.1.04.2
01.1.04.C	Piston type motor	01.1.04.3
01.1.05	Water powered unit	01.1.05
01.1.06	Wind powered unit	01.1.06
01.2	Basic pedestrian controlled and other tractors [ISO Basic and walking tractors]	—
01.2.A	Basic tractor	—
01.2.B	Fast tractor	—
01.2.01	Tracklaying tractor	01.2.01
01.2.01.A	Narrow tracklaying tractor [ISO Narrow track tractor (vineyard tractor etc.)]	01.2.01.1
01.2.01.B	Tracklaying garden tractor	—
01.2.02	Half-track tractor	01.2.02
01.2.03	Wheeled tractor	01.2.03
01.2.03.A	Two-wheel drive tractor	01.2.03.1

Table 1 — List of terms in classified order

British Standard term number	Term (* indicates term not defined in this British Standard)	ISO 3339-0 class number
01.2.03.A.1	Tricycle tractor	—
01.2.03.B	Four-wheel drive tractor	01.2.03.2
01.2.03.B.1	Four-wheel steering tractor	01.2.03.2.1
01.2.03.B.2	Articulated tractor	01.2.03.2.2
01.2.03.B.3	Skid-steer tractor	—
01.2.03.C	Narrow track tractor	01.2.03.1.4 and 01.2.03.2.4
01.2.03.D	High clearance tractor	—
01.2.03.E	Compact tractor	—
01.2.03.F	Remote controlled tractor	—
01.2.04	Garden tractor [ISO Micro-tractor (garden)]	01.2.04
01.2.05	Pedestrian-controlled tractor [ISO Walking tractor (pedestrian-control)]	01.2.05
01.3	Carrier tractors	01.3
01.3.A	Carrier tractor	—
01.3.01	Self-propelled tool carrier [ISO Tool-carrying tractor]	01.3.01
01.3.02	Tractor with load platform [ISO Platform tractor]	01.3.02
01.3.03	Stilt tractor*	01.3.03
01.3.04	Low ground pressure vehicle	01.3.04
01.3.05	All terrain vehicle	—
01.4	Self-propelled carriers	01.4
01.4.A	Self-propelled carrier	—
01.4.01	Gantry [ISO Self-propelled carrier unit]	01.4.01
01.4.02	Stilt carrier*	01.4.02
01.4.03	Greenhouse carrier	01.4.03
01.4.04	Multi-purpose tool carrier	—
01.5	Winches [ISO Towing unit]	01.5
01.5.A	Winch	—
01.5.01	Wire rope haulage unit*	01.5.01
01.5.02	Motor winch	01.5.02
01.5.03	Manually operated winch	01.5.01.1
01.6	Agricultural air cushion vehicle*	01.6
01.7	Agricultural aircraft	01.7
01.7.01	Agricultural fixed-wing aircraft	01.7.01
01.7.02	Agricultural helicopter	01.7.02
01.7.03	Microlight aircraft [ISO Motorized wings (microlights etc.)]	01.7.03

Table 1 — List of terms in classified order

British Standard term number	Term (* indicates term not defined in this British Standard)	ISO 3339-0 class number
01.8	Tractor and machinery couplings and other equipment [ISO Tractor and machinery coupling equipment]	01.8
01.8.01	Hitch	01.8.01
01.8.01.A	Pick-up hitch	—
01.8.01.B	Clevis	01.8.01.1
01.8.01.C	Hook	01.8.01.2
01.8.01.D	Ring hitch [ISO Ring-bolt]	01.8.01.3
01.8.01.E	Drawbar	01.8.01.4
01.8.01.F	Three-point linkage	01.8.01.7
01.8.01.F.1	Upper and lower links	—
01.8.01.F.2	Lift arms	—
01.8.01.F.3	Lift rods	—
01.8.01.F.4	Levelling lift rod	—
01.8.01.F.5	Levelling box	—
01.8.01.F.6	Linkage stabilizer	—
01.8.01.F.7	Linkage check chain or rod	—
01.8.01.G	Three-point hitch coupler	—
01.8.02	Power transmission	01.8.02
01.8.02.A	Main transmission	—
01.8.02.A.1	Transmission inhibitor	—
01.8.02.B	Power take-off	01.8.02.1.1
01.8.02.B.1	Transmission power take-off	—
01.8.02.B.2	Live power take-off	—
01.8.02.B.3	Independent power take-off	—
01.8.02.B.4	Ground speed power take-off	—
01.8.02.B.5	Power take-off master shield	—
01.8.02.B.6	Power take-off cover	—
01.8.02.B.7	Power take-off shaft	—
01.8.02.B.8	Power take-off shaft guard	—
01.8.02.C	Power lift	—
01.8.02.D	Hydraulic lift	—
01.8.02.E	External hydraulic control valve	—
01.8.02.F	Live hydraulic pump	—
01.8.02.G	Hydraulic tapping	—
01.8.02.H	Quick-release hydraulic coupling	—
01.8.02.I	Break-away hydraulic coupling	—
01.8.02.J	Draught control	—
01.8.02.K	External remote hydraulic cylinder	—
01.8.02.L	Belt pulley	—
01.8.02.M	Variable speed governor	—
01.8.02.N	Creep speed gear	—

Table 1 — List of terms in classified order

British Standard term number	Term (* indicates term not defined in this British Standard)	ISO 3339-0 class number
01.8.02.P	Differential	—
01.8.02.P.1	Differential lock	—
01.8.A.1	Power assisted steering	—
01.8.A.2	Power steering	—
01.8.B	Braking system	01.8.02.4.1
01.8.B.1	Service braking system	—
01.8.B.2	Split braking system	—
01.8.B.3	Secondary braking system	—
01.8.B.4	Parking brake	—
01.8.B.5	Transmission brake	—
01.8.B.6	Independent brake	—
01.8.C	Roll over protective structure	—
01.8.C.1	Safety frame	—
01.8.C.2	Safety cab	—
01.8.C.3	Falling object protective structure	—
01.8.D	Auxiliary electric power socket	—
01.8.D.1	Trailer lighting socket	—
01.8.E	Pneumatic tyred wheel	—
01.8.E.1	Wheel strakes	—
01.8.F	Steel wheel	—
01.8.F.1	Spade lug	—
01.8.F.2	Cleat	—
01.8.F.3	Extension rim	—
01.8.F.4	Road band	—
01.8.F.5	Skeleton wheel	—
01.8.G	Cage wheel	—
01.8.H	Dual wheels	—
01.8.I	Seedbed wheels	—
01.8.J	Track	—
01.8.J.1	Grouser	—
01.8.J.2	Road plates	—
01.8.K	Ballast weight	—