

Glossary of

Building and civil engineering terms —

Part 1: General and miscellaneous —

Section 1.5: Operations; associated
plant and equipment —

Subsection 1.5.5 Plant and equipment

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Basic Data and Performance Criteria for Civil Engineering and Building Structures Standards Policy Committee (BDB/-) to Technical Committee BDB/3, upon which the following bodies were represented:

- Association of Builders' Hardware Manufacturers
- Association of Building Component Manufacturers
- Brick Development Association
- British Precast Concrete Federation Ltd.
- British Standards Society
- Building Employers Confederation
- Building Services Research and Information Association
- Chartered Institution of Building Services Engineers
- Concrete Society
- Contract Flooring Association
- Department of the Environment (Building Research Establishment)
- Department of the Environment (Property Services Agency)
- Federation of Civil Engineering Contractors
- Fibre Building Board Organisation (FIDOR)
- Gypsum Products Development Association
- Incorporated Association of Architects and Surveyors
- Institution of Civil Engineers
- Institution of Highways and Transportation
- Institution of Structural Engineers
- Institution of Water and Environmental Management
- National Council of Building Material Producers
- National Federation of Roofing Contractors
- National House-building Council
- Royal Institute of British Architects
- Stone Federation
- Timber Trade Federation
- Water Companies Association
- Water Services Association of England and Wales

The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

- British Sign Association
- Chartered Institute of Building
- Chartered Society of Designers
- Construction Plant (Hire Association)
- Federation of Manufacturers of Construction Equipment and Cranes
- Glass and Glazing Federation
- Patent Glazing Contractors' Association
- Royal Institution of Chartered Surveyors

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Foreword

This Subsection of Part 1 of BS 6100 has been prepared under the direction of the Basic Data and Performance Criteria for Civil Engineering and Building Structures Standards Policy Committee.

The Subsection provides a broad selection of plant and equipment, taking account of the need to include items not defined elsewhere in BS 6100, but not repeating specialized items included in other Sections and Subsections. The Construction Plant Hire Association list of items available for hire was used as a check list.

Some of the technical operations referred to in definitions, e.g. “excavation”, are not explained in this Subsection because this information is given in other Sections and Subsections of BS 6100. Some materials and components used, e.g. “screws”, are also explained elsewhere. Further terms for tools and equipment relating to stonework are included in Section 5.2. Definitions of earthmoving plant are technically equivalent to BS 6914.

In addition selected terms have been repeated, with identical or equivalent definitions, from a number of other British Standards including BS 1129, BS 5973 and BS 6492-1.

A general introduction to and explanation of this glossary is given in Part 0 of BS 6100, which itemizes the Parts, Sections and Subsections into which this glossary is divided and provides a general alphabetical index of all the terms in the Sections and Subsections already published. Those using individual Sections and Subsections of this glossary are urged to consult Part 0 when doing so.

The other Sections of this Part are as follows:

- 1.0 General
- 1.1 Types of buildings
- 1.2 Spaces
- 1.3 Parts of construction works
- 1.4 Materials
- 1.6 Persons
- 1.7 Characteristics and performance
- 1.8 Environment and physical planning

The other Subsections of this Section are as follows:

- 1.5.1 Coordination of dimensions; tolerances and accuracy
- 1.5.2 Jointing
- 1.5.3 Setting out and measurement
- 1.5.6 Documentation excluding drawings
- 1.5.7 Drawings

Terms are listed alphabetically in the index and are referred to by numbers which are found against the terms in the body of the Subsection. They are arranged in a classified order, each term having an individual number consisting of seven digits in two parts, the first of three digits, the second of four. The first three digits represent the number of the Part, Section and Subsection. The fourth digit represents the group of terms, the fifth digit represents the subgroup of terms, and the last two digits represent the place within the subgroup.

Alternative terms are given in medium type below the preferred terms with their status indicated by “deprecated”. These terms are not individually numbered but are included in the index with a reference to the preferred term. Terms of more than one word, e.g. “screw jack” are written in a direct style, not as “jack, screw”. The inverted term is included in the index with reference to the direct term.

Italicized words indicate terms that are defined elsewhere in this Subsection.

NOTE The titles of the publications referred to in this standard are listed on the inside back cover.

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 20, 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.

No.	Term	Definition
155 1 Base terms		
155 1001	site equipment	Equipment required for construction work that is not incorporated in the final works.
155 1002	plant	Machinery used in construction work.
155 1003	tool	Hand-held item used to carry out operations in construction work.
155 1004	hand tool	<i>Tool</i> without power.
155 1005	power tool	<i>Tool</i> driven by power source.
155 1006	attachment equipment <i>deprecated</i>	Device that is fastened or connected in order to carry out a particular operation.
155 1007	base machine	Machine that requires an <i>attachment</i> to be added to it in order to fulfil a function.
155 1008	crawler tracks caterpillar tracks <i>deprecated</i>	Linked series of parts in the form of a continuous belt that enables a vehicle or machine to travel over a soft or unmade surface.
155 1009	crane	Machine that incorporates an elevated structural member beneath which suspended loads can be raised, lowered and moved horizontally.
155 1010	drill	<i>Tool</i> for forming cylindrical holes.
155 1011	conveyor	Machine that continuously transports material, usually in granular or powder form, along a gentle slope using endless belt, rope or chain.

155 2 Earth moving, excavating, blasting plant

155 21 Earth moving

155 2101	tractor	Self-propelled machine used to exert a force through a mounted attachment or drawbar.
155 2102	agricultural tractor	Four-wheeled <i>tractor</i> with power take-off equipped with large rear wheels to enable it to operate on rough ground.
155 2103	dozer equipment	<i>Attachment</i> or part of <i>plant</i> that consists of a front blade, its frame, and controls for positioning the blade.
155 2104	angling dozer	<i>Dozer equipment</i> the blade position of which may be changed so that the cutting edge is at an angle to the direction of travel.
155 2105	straight dozer	<i>Dozer equipment</i> the blade of which is maintained in a position where the cutting edge is at right angles to the direction of travel.
155 2106	excavator	Self-propelled machine with an upper structure capable of 360° rotation, that excavates, elevates, swings, and dumps materials, by the action of a bucket.
155 2107	hydraulic excavator	<i>Excavator</i> that operates by means of hydraulic mechanisms.
155 2108	rope-operated excavator	<i>Excavator</i> that operates by means of ropes.
155 2109	face shovel front shovel <i>deprecated</i>	<i>Excavator attachment</i> in which a bucket fixed to a boom is filled by being moved away from the machine and upwards.

No.	Term	Definition
155 2110	drag shovel backacter <i>deprecated</i>	<i>Rope-operated excavator attachment</i> in which a bucket fixed to a boom is filled by being dragged towards the machine.
155 2111	drag line	<i>Rope-operated excavator attachment</i> in which a bucket is filled by being dragged towards the machine.
155 2112	dump truck hauler <i>deprecated</i>	Self-propelled wheeled machine that has an open body that transports and dumps or spreads materials.
155 2113	rear dump truck	<i>Dump truck</i> that discharges material to the rear.
155 2114	side dump truck	<i>Dump truck</i> that discharges material to the side.
155 2115	scraper	Machine mounted on wheels, self-propelled or capable of being towed by a <i>tractor</i> , that has a large bowl with cutting edge and is used for digging, transporting and dumping or spreading material.
155 2116	elevating scraper	<i>Scraper</i> that has a powered mechanism fixed to the bowl to assist loading.
155 2117	grader	Self-propelled machine with an adjustable blade positioned between front and rear axles that cuts, moves and spreads material.
155 2118	loader	Self-propelled machine, with an integral front-mounted bucket supporting structures and linkage, that loads or excavates through motion of the machine.
155 2119	pile driver	<i>Base machine</i> with front end equipment designed to drive piles and accommodate a pile and driving hammer.
155 2120	ripper equipment	Equipment attached to, or drawn by, a <i>base machine</i> that has one or more tines that are drawn through the ground for the purpose of breaking and loosening it.
155 2121	hinge type ripper	<i>Ripper equipment</i> in which the angle of the <i>tine</i> to the ground varies according to the working depth.
155 2122	parallelogram type ripper	<i>Ripper equipment</i> in which the angle of the <i>tine</i> to the ground remains constant regardless of variation in working depth.
155 2123	variable geometry ripper	<i>Ripper equipment</i> in which the ripping angle of the <i>tine</i> to the ground can be varied whilst keeping a constant working depth.
155 2124	trencher	Self-propelled machine used primarily to excavate, elevate and tip material to produce a trench in a continuous operation.
155 2125	skid steer machine	Self-propelled machine that is steered by using variation of speed and/or direction of rotation between wheels on opposite sides of the machine on fixed axles.
155 2126	backhoe loader excavator loader <i>deprecated</i>	Self-propelled wheeled machine with an integral front mounted bucket and a rear mounted backhoe.
155 2127	grab bucket	Excavating <i>attachment</i> hung from a <i>crane</i> or <i>excavator</i> , that comprises a split and hinged bucket fitted with curved jaws or tines that dig while the bucket is being dropped and that move together to pick material up while the bucket is being raised.
155 2128	off-set boom	Boom for a <i>hydraulic excavator</i> with a swivel, capable of being moved to one side of the machine's centreline.

No.	Term	Definition
155 2129	mole plough	Vertical knife blade with a horizontal bullet shape at its lower end, that is pulled through the ground to form a continuous hole for cables, pipes or drainage.
155 2130	mole	Cylindrical equipment, often bullet shaped, powered by compressed air that without disturbing the surface forms a hole in the ground for services by hammering the soil face in front of it.
155 2131	side boom attachment	Lifting boom <i>attachment</i> that can be fitted to the side frame of a <i>tractor</i> with <i>crawler tracks</i> .
155 2132	four-in-one bucket	Bucket fitted to a <i>base machine</i> designed to carry out four separate functions: digging, scraping, grabbing and loading.
155 2133	small dumper	Rubber-wheeled vehicle with two large wheels in front and two small ones behind, with a small skip over the large wheels.
155 2134	high discharge skip dumper	<i>Small dumper</i> with a high pivot point that gives it the ability to tip concrete into a bucket attached to a <i>crane</i> .
155 2135	swivel skip dumper	<i>Small dumper</i> the tip of which can be rotated through 180° to discharge over either side.
155 2136	bowser	Trailer with an enclosed tank for carrying liquids.
155 2137	power barrow	Pedestrian-controlled motorized wheelbarrow.
155 2138	pallet truck	Machine that engages under a pallet, jacks it clear of the ground on its casters at the front of its two <i>tines</i> , so that the pallet can be transported.
155 2139	cutter boom	Hydraulically supported boom, on which is mounted one or more rotating cutters that excavate the ground.
155 22 Rock excavating		
155 2201	auger	<i>Tool</i> with a spiral cutting blade, for boring holes.
155 2202	rock drill	Drill for use in rock.
155 2203	jackhammer drill	Light rotary percussive <i>rock drill</i> .
155 2204	jackhammer	<i>Compressed air tool</i> that is a percussive <i>rock drill</i> , either hand held or used with light support.
155 2205	air leg	Pneumatic cylinder, with <i>attachments</i> , that provides support and thrust for a <i>rock drill</i> .
155 2206	drill steel	Steel bar, usually hexagonal, used for rock drilling, with a shank for insertion into a <i>rock drill</i> at one end and an integral or detachable <i>bit</i> at the other.
155 2207	drill rod	Hollow rod, usually round in section, threaded at each end, used with other rods of the same kind to extend the length of shot holes or core holes in rock.
155 2208	bit	<i>Attachment</i> for insertion into a rotary <i>tool</i> or machine for a particular purpose.
155 2209	drill bit	<i>Bit</i> used for drilling holes.
155 2210	drilling rig	Structure for supporting a <i>rock drill</i> .
155 2211	core drill	<i>Drill</i> for cutting a cylinder from in situ materials.