
GLOSSARY OF TECHNICAL TERMS

This glossary of technical terms contains terms used in this document as they relate to our business. As such, these terms and their meanings may not always correspond to standard industry meaning or usage of these terms.

"aggregates"	a mixture which generally consists of gravel or crushed stone, that is used as a principal raw material for concrete
"blast-furnace slag"	a by-product from the production of steel, which is used as inherent hydraulic materials when mixed with Portland Cement
"blended cement"	a kind of hydraulic cement which is used in combination with local pozzolana materials and blast-furnace slag, which can be used alone or with other Portland Cement products in the construction industry
"CAGR"	compound annual growth rate
"cement"	a mixture of clinker, clay, silica and gypsum. It is a fine powder which sets to a hard mass when mixed with water as a result of hydration. The term "cement" generally refers to "hydraulic cement"
"clinker"	grayish-black pellets predominantly the size of marbles, which is a main ingredient in Portland Cement and produced largely from limestone, clay and a variety of minerals and iron oxide at high temperatures which consists primarily of hydraulic calcium silicates
"clay"	a natural mineral having plastic properties and composed of very fine particles, moldable when wet and fused into permanent form at very high temperatures
"Composite Portland Cement"	a kind of Portland Cement with two or more different kinds of inter-related additives and of lower compressive strength, which is mainly used for construction projects which require low quality concrete, such as small buildings and farm houses
"concrete"	a mixture of aggregates, river sands, cements and water that will harden because of cement's hydration, generally used in the construction industry
"dwt"	the gross weight in tons of vessels that a berth is capable of undertaking expressed in weight tons, reflecting the loading capacity of a vessel
"FAI"	fixed asset investment
"fly ash"	the ash by-product of burning coal in thermal power plants, which is used as inherent hydraulic materials when mixed with Portland Cement

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"GDP"	gross domestic product
"gypsum"	a mineral consisting of hydrous calcium sulphate that is used as a set-controlling agent when added to soil amendment and in making plaster of paris
"hydration"	a process occurring when water is added to Portland Cement to form hydraulic cement paste, which will generally take place within a period of time that will make the hydraulic cement paste becomes harder and stronger
"hydraulic cement"	a generic term that includes Portland Cement and other blended cement for specific applications. All hydraulic cement sets and hardens by reacting chemically with water
"limestone"	a sedimentary rock, mainly composed of mineral calcite
"mortar"	a paste formed by the mixture of cement, water and fine aggregate, used for binding construction blocks together or as plaster
"mpa"	megapascal (one million pascals), a unit of pressure equal to 145.04 pound-force per square inch
"NSP"	a new suspension preheater dry process under which the raw materials of cement are preheated and disintegrated before being fed into a rotary kiln where they are chemically changed into clinker
"on-site batching"	a process in which cement, a cement silo and machinery are transported to the construction site in order to mix and form concrete on demand at the relevant construction site. On-site batching can compromise the quality of the concrete produced since it can be cost-prohibitive to move state-of-the-art production and quality inspection equipment to the relevant construction site. On-site batching can be wasteful and less environmentally friendly since 5% of the cement transported becomes dust during the initial packing in, and subsequent unpacking from, paper or plastic bags. Paper or plastic bag manufacturing and disposal creates unnecessary waste
"Ordinary Portland Cement"	a kind of Portland Cement, which hardens quickly and develops a relatively strong initial compressive strength. It is often used for building works which have to be completed within a short period of time
"Portland Cement"	a kind of hydraulic cement which has a higher compressive strength than Ordinary Portland Cement and is used mainly for construction projects which require cement of higher strength
"precast concrete"	concrete that is pre-mixed and formed into custom made pieces (such as bricks and panels) and delivered as a finished product to the consumer

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"ready mixed concrete"	concrete that is mixed at local plants and then delivered to the consumer for subsequent setting
"rotary kiln"	a large, cylindrical steel tube which acts as an oven and heats raw materials to produce clinker. The majority of rotary kilns use the new dry process and NSP technology. Rotary kilns are more fuel-efficient and less pollutive than vertical kilns.
"sandstone"	a sedimentary rock formed mainly of quartz grains of sand size, cemented with aluminosilicates or iron compounds or both
"setting"	the process for producing concrete whereby cement is mixed with water and the resulting paste hardens by hydration into a rigid solid
"setting time"	the time for setting to complete
"shotcrete"	mortar or concrete projected through a hose and pneumatically projected at high velocity onto a surface
"silo terminals"	warehouse for storage of cement in transit
"ton" or "tons"	metric ton, equivalent to 1,000 kilograms
"vertical kiln"	a vertical cylindrical device used for sintering, burning or drying raw materials. Vertical kilns employ an older technology than rotary kilns. They have lower production efficiency and do not normally produce high quality clinker.