

What is GGBS?

GGBS (Ground Granulated Blast-furnace Slag) is a cementitious material whose main use is in concrete and is a by-product from the blast-furnaces used to make iron.

Blast-furnaces operate at temperatures of about 1,500° C and are fed with a carefully controlled mixture of iron ore, coke and limestone. The iron ore is reduced to iron and the remaining materials form a slag that floats on top of the iron.

This slag is periodically tapped off as a molten liquid and if it is to be used for the manufacture of GGBS it has to be rapidly quenched in large volumes of water. The quenching optimises the cementitious properties and produces granules similar to a coarse sand. This ‘granulated’ slag is then dried and ground to a fine powder.



The major use of GGBS is in ready-mixed concrete, GGBS has many technical advantages for concrete.

1. Considerable sustainability benefits
2. Lower early-age temperature rise, reducing the risk of thermal cracking in large pours
3. Minimizes the risk of damaging internal reactions such as Alkali Silica Reaction and Delayed Ettringite Formation
4. High resistance to chloride ingress thus reducing the risk of steel reinforcement corrosion
5. High resistance to attack by sulphates and other chemicals
6. Better workability, making placing and compaction easier
7. Pleasing off-white colour

The Industrial Waste Residue R&D Center Test Base of CHAENG has 2 complete vertical mill grinding test systems, ball mill grinding test systems, and more than 20 sets of various powder and concrete test equipment, which can meet the requirements of various types of industrial waste residue powder test about activity, fineness, grindability, metal consumption, and concrete workability, tensile and compressive strength, etc. It provides equipment selection and reference numerical basis for the resource utilization of industrial waste residues.

If you have GGBS production equipment needs, welcome to consult, we will provide you with the most detailed introduction.

