



JSW Cement
AUTHORISED DISTRIBUTOR



Portland Slag Cement (PSC)

Portland Slag Cement, commonly known as PSC, is blended cement. Slag is, essentially, a non-metallic product comprising of more than 90% glass with silicates and alumino-silicates of lime. At JSW Cement, we use superior quality slag produced at our steel manufacturing plant, conforming to IS: 12089 standards for producing PSC. It is created with a combination of upto 45- 50% slag, 45% – 50% clinker, and 3-5% gypsum. PSC has been voted as the most suitable cement for mass construction because of its low heat of hydration.

The multi-fold advantages of PSC

PSC's inherent chemistry gives it several advantages over ordinary cement. Apart from being more environment-friendly, it offers;

- ✓ Ultimate compressive strength
- ✓ Excellent resistance to Chloride & Sulphate attacks
- ✓ Low risk of cracking
- ✓ Improved workability
- ✓ Better compatibility with all types of admixtures
- ✓ Superior finish
- ✓ Ease of pumping
- ✓ Better resistance against alkali-silica reaction
- ✓ Minimised shrinkage cracks



Where PSC can be used?

- ✓ All types of residential, commercial and industrial projects
- ✓ Dams and other mass concrete works
- ✓ Water retaining structures
- ✓ Concrete roads and flyovers
- ✓ Most suitable for marine constructions
- ✓ Pre-cast concrete products
- ✓ Foundations and piles construction

Applications

- ✓ RCC in all types of foundations and super structure works.
- ✓ General building construction.
- ✓ Express ways.
- ✓ Mass concrete works in Dams, Spillways, Canals, Foundations, etc.
- ✓ Underground works, Retaining walls, culverts and drainage works.
- ✓ Effluent and sewage treatment plants.
- ✓ Grouts and mortars and cement based products.
- ✓ Waterproofing, Plastering, Brick work and Finishing works.
- ✓ Marine works.

Technical Benefits:

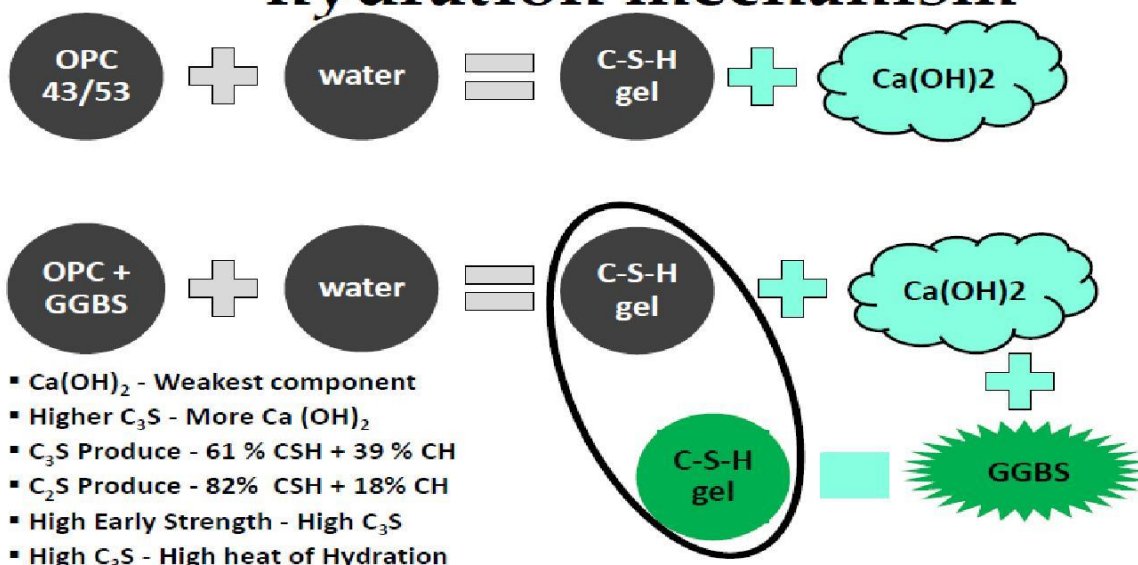
- ✓ Better workability.
- ✓ Making placing and compaction easier.
- ✓ Lower early-age temperature rise.
- ✓ Reducing the risk of thermal cracking in large pours.
- ✓ Resistance to Alkali Silica Reactivity (ASR).
- ✓ High resistance to chloride attack.
- ✓ Reducing the risk of reinforcement corrosion.
- ✓ High resistance to attack by sulphate and other chemicals.
- ✓ Considerable sustainability benefits.

HOW THE PORTLAND SLAG CEMENT IS MADE?

Portland Slag Cement IS 455-1989

- Portland Slag cement is manufactured by either inter-grinding the Portland cement clinker, Gypsum and granulated slag or blending the ground granulated blast furnace slag (GGBS) with Ordinary Portland cement by means of mechanical blenders.
- Slag cement is manufactured as per BIS specification IS 455 - 1989 and quantity of slag added shall be in the range of 25% to 70%.

OPC & Slag Cement hydration mechanism



AWARDS

