



38 Practical Application of PCa with Super-High Durability Concrete



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R&D Objectives and Subjects

Objectives

In order to extend the lifespan of damaged bridges and to shorten the period of traffic regulation during renewal construction, a precast concrete member with high durability has been developed with blast furnace slag sand.

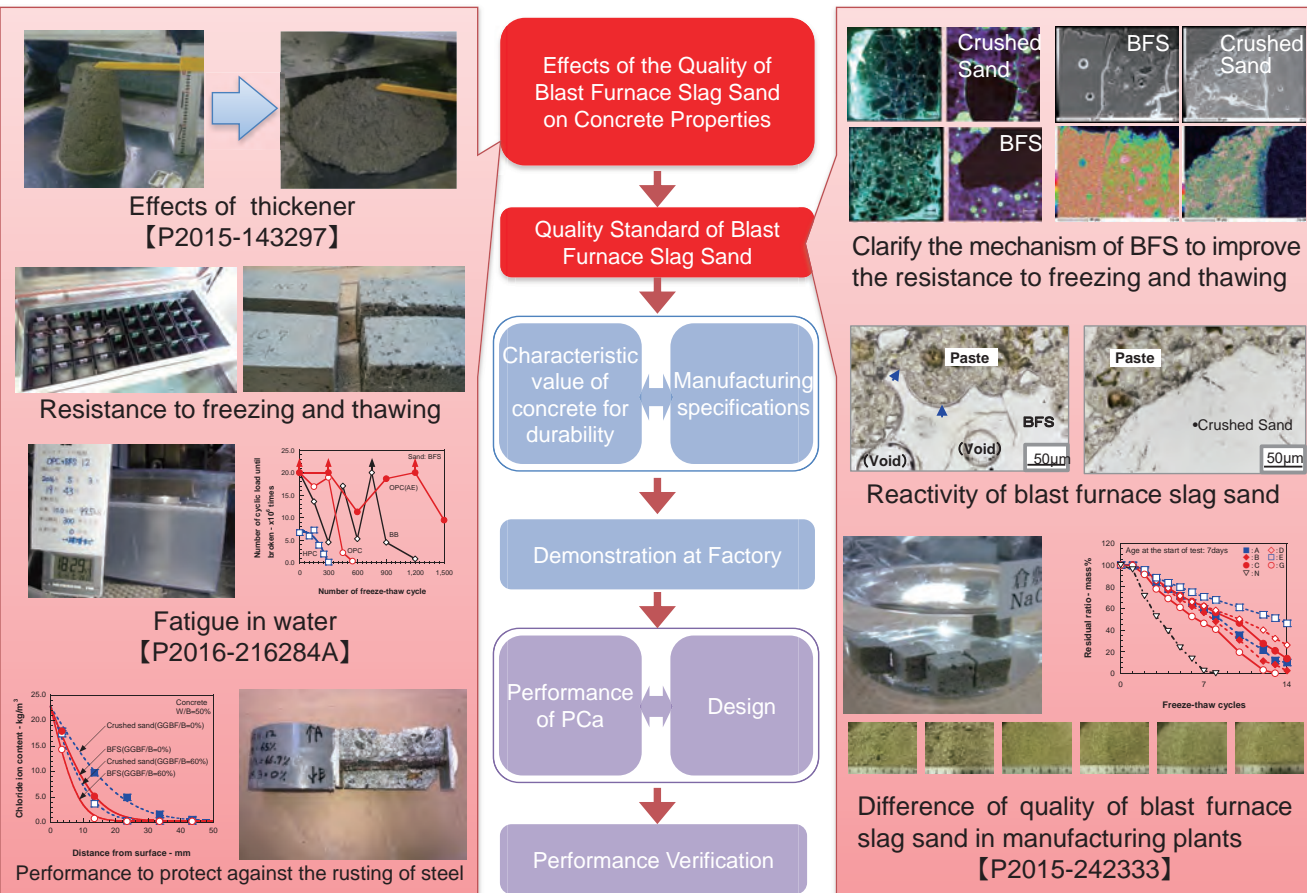
- PC (Pre-stressed Concrete) PCa member
⇒ Durable to traffic load under water supply conditions
- RC (Reinforced Concrete) PCa member
⇒ High resistance to freezing and thawing without AE agent

Subjects

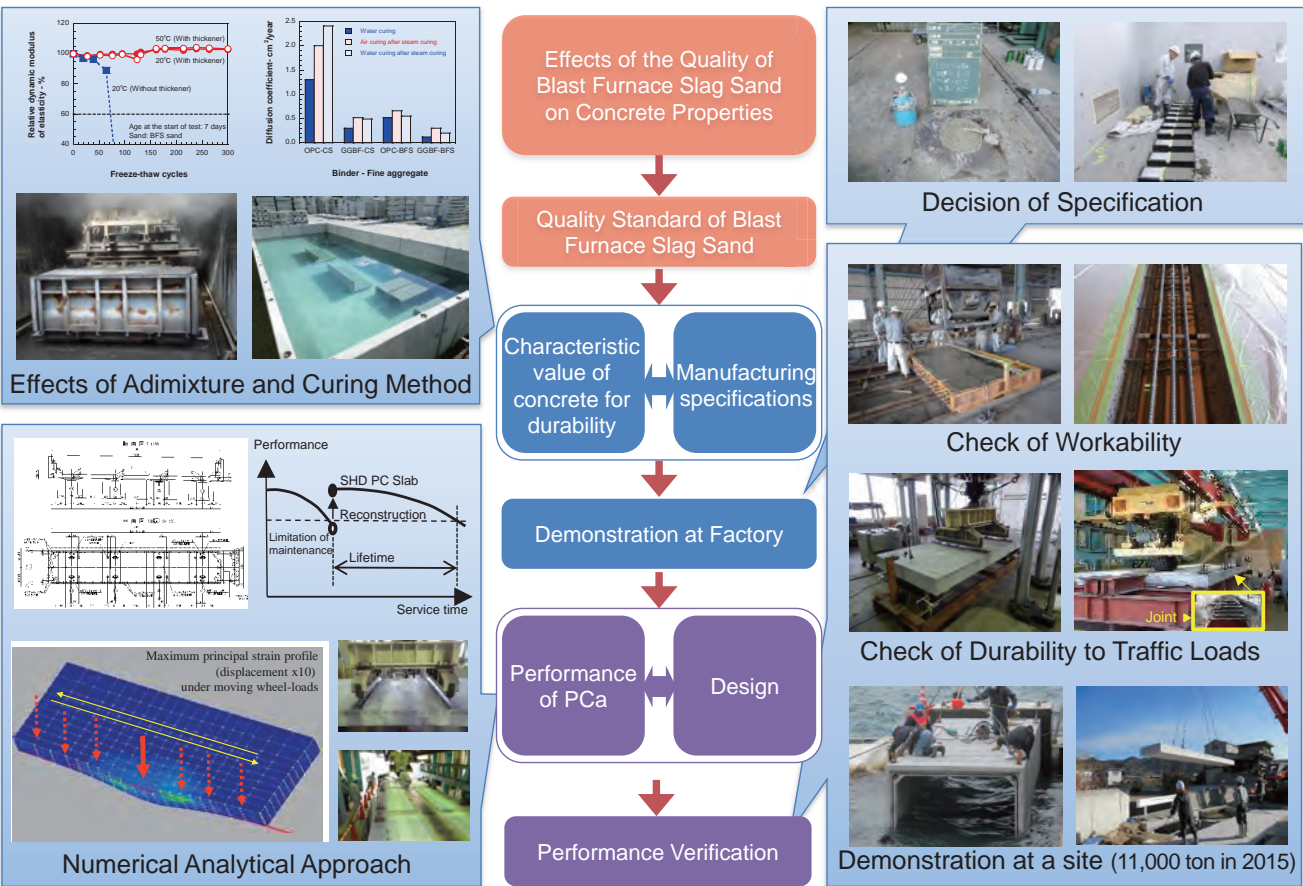
- Publication of the guidelines for the manufacturing of highly durable PCa members with blast furnace slag sand, and construction with it on a site.
- Clarification of the mechanism of blast furnace slag sand to improve the durability of concrete
- Establishment of a supplying system for the blast furnace slag sand in the domestic precast factories
- Establishment of the inspection and quality control system to manufacture the reliable products



Current Accomplishments (1/2)



Current Accomplishments (2/2)



Goals

