

Houston Cement Import Facility



PROJECT: Storage and Loadout System for Cement Facility

CLIENT: Houston Cement Company

LOCATION: Port of Houston Cement Terminal, Houston, TX

SERVICES: Preliminary and Final Design, Study Phase Services, Design and Automation, Programming and Commissioning

DESCRIPTION:

River Consulting and Continental Construction designed and built the Houston Cement facility as a joint partnership. The team explored site layout and design concepts to deliver an efficient terminal designed to import and distribute 1.5 million mtpy of cement. The facility is capable of handling Panamax vessels at the 645-foot dock utilizing the largest capacity cement ship unloader currently operating in the United States, fully automated and contained conveying systems, and six concrete silos with 100,000 ton of storage capacity.

This state of the art facility utilizes three truck loadout lanes located beneath the silos, equipped with automated weighing and loading systems. These systems control the flow of cement loading into the trucks, and automatically shut off the flow of cement once the truck has reached the target weight, providing a fast, clean and efficient experience. Each lane shares two silos and the cement inventory is automatically monitored in the office building located onsite allowing for effective supply chain management.

PRINCIPAL FEATURES:

- Six concrete silos with 100,000 ton storage capacity
- Fully automated complex and fully contained conveying systems
- Unique hopper bottom support structure utilizing internal supporting columns to optimise support structure
- Three lanes of automated truck load out with 500 tph loading rate
- Inbound conveyor belt system, bucket elevator system, and air slide system
- State of the art receiving and loadout rates



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