



WBCT Crane Structural Design Review San Pedro, California

West Basin Container Terminal purchased four dockside container cranes from ZPMC for Berths 100-102 at Port of Los Angeles. Liftech provided the technical specifications, structural design and review assistance, and fabrication support for the new cranes.

Client:
West Basin Container Terminal LLC
San Pedro, California

The design constraints for the new cranes presented a unique challenge. The new crane geometry is similar to that of the existing cranes, but the structure is designed to comply with new seismic criteria, which are more demanding for the crane structure.

The cranes were required to comply with the Port of Los Angeles wharf seismic design criteria. The weight and natural period of the new cranes were required to match those of the existing cranes. To help meet this requirement, the cranes were designed with a ductile frame system, which limits the load and displacement demand on the crane and wharf during an earthquake.