DOMESTIC PROJECTS

CIVIL ENGINEERING

Deepening and Earthquake-proofing of Berths at Kobe Port Island Stage-II Area (Hyogo Prefecture)

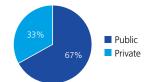
Kobe Port as greater Hanshin Port has been designated to be a nation's "Strategic International Container Port" and the Project for Development of Next Generation High Standard Container Terminals is underway. Penta-Ocean took part in this effort and performed the deepening and earthquake-proofing of the wharf to accommodate larger container ships.

In strengthening the seismic resistance of the Berths PC-15 – 17 while in operation, Penta-Ocean installed 450 ground anchors at the length of 83.2 meters, being the longest ever used in Japan. Since the bearing layer in the project site is very deep, such long ground anchors were installed with a high degree of precision.

Penta-Ocean also completed the dredging work for the deepening of the access channel and basin of the Berths PC-15 - 17 up to a depth of 16 meters.



When fully completed the development project, it will be capable to accommodate two 100,000 ton post panamax container ships simultaneously.



Domestic Civil Engineering: 2011 Orders Received by Sectors (Non-Consolidated)

Orders received for domestic civil engineering projects decreased by 7.7% compared to the previous year. While orders received for private-sector civil engineering works increased substantially, national and regional orders for the construction of government facilities declined due to a steep year-on-year decline in budgets for public works investment.

BUILDING CONSTRUCTION

Yamaguchi Kirara EXPO Memorial Park Swimming Pool (Yamaguchi Prefecture)

An official indoor competitive swimming pool has been completed at Yamaguchi Kirara EXPO Memorial Park in Yamaguchi City. This pool is scheduled to serve as a venue for competitive swimming events during Japan's National Sports Festival in September 2011.

The large, egg-shaped roof over the main pool has a three-dimensional, curved surface. The portion over the pool employs a membrane roof that allows natural light and reduces usage of artificial lighting during the day that contributes to the energy conservation.

The pool was further designed with the aim of being "a facility that people can use with peace of mind." As such, materials were selected that are as gentle as possible on the skin, down to the individual tiles used.





Domestic Building Construction: 2011 Orders Received by Sectors (Non-Consolidated)

A recovery in private-sector capital investment fueled an increase in orders received for private-sector non-residential construction, while orders received for government facility construction projects including waste incineration plants were brisk. Orders received for domestic building construction rose by 17% compared to the previous year.