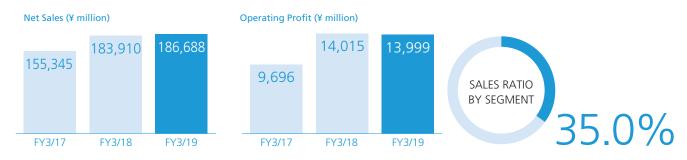
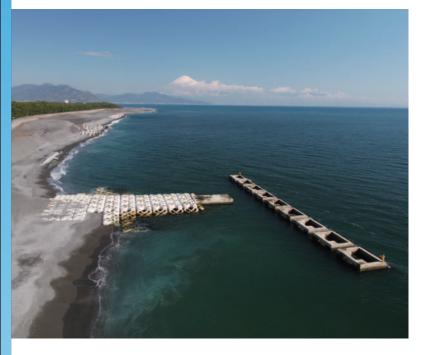
## Domestic Civil Engineering





## Miho L-shaped Jetty

#### Shizuoka Prefecture

To protect the sandy beach of Miho-no-Matsubara, which forms part of the World Cultural Heritage Site "Mt. Fuji," our patented S-VHS method is adopted in constructing the groin on the coast of Shimizu in the City of Shizuoka. The S-VHS method uses caissons with a sloped surface on the offshore side. All caissons are designed with slits to absorb and weaken the wave forces, and have steel pipe piled legs firmly fixing them to the ground. Our technology helps relieve the severe impact of waves in Suruga Bay, preserving the white sand and green pines, and it also contributes to landscape improvement and regional disaster prevention.



## **Mirai Ships Construction Project**

Miyagi Prefecture

This project is a reorganization of a shipyard that has supported the fisheries industry, a key industry in Kesennuma City. The biggest feature of this project is the incorporation of the ship lift system, which is the third instance of its use in Japan. In this method, a ship is lifted vertically using 10 hoists (winding machines) and then pulled into the site by horizontal movement. This system enables the operation inside the seawalls, a place less susceptible to tsunamis.





### **Hisamitsu Pharmaceutical Museum**

#### Saga Prefecture

The museum is located among lush greenery within the premises of the Hisamitsu Pharmaceutical Co., Inc. Kyushu Headquarters and Tosu Factory. It was built to commemorate the company's 170th anniversary. The world-renowned Italian sculptor, Cecco Bonanotte, was in charge of the basic design. During construction, building information modeling (BIM) technology was used to achieve superior design, coupled with highly efficient energy-saving technologies. It has earned the Zero Energy Building (ZEB) certification, the first in Saga Prefecture and one of only a limited number of such buildings in the entire country.



## **Glacier Tower Mitaka/Trikona**

#### Tokyo

This is a redevelopment project involving construction of a commercial/office/residential complex directly connected to the south exit of Mitaka railway station with a pedestrian deck. The building is about 100 meters in height and is known as the tallest building in Mitaka City. From this building, people can enjoy views in all directions, including Mt. Fuji and the night view of the skyscrapers in downtown Tokyo. As the building name "Trikona" (meaning a triangle) suggests, expressive appearances created by its triangular-shaped lot and the varying wall finishes have attracted attention to the building as a new symbol of the city.





# New Construction Project of the International Culinary Institute

Hong Kong

The International Culinary Institute (ICI) is one of the vocational schools belonging to the Vocational Training Council (VTC), where students can study international cuisine. The ICI building is located adjacent to the existing VTC building, and the two buildings are connected by a tunnel on the second basement floor, providing direct access to the Chinese Culinary Institute across the road. In spite of the complex shape of the building and a variety of finishes on the façades, we were able to achieve excellent detailing with high precision and full control.

## Construction of the Thilawa Grain Terminal

Myanmar

In this project, we constructed a terminal dedicated to grain and feed bulk cargo related facilities, including grain silos, warehouses, and a pier under a full turnkey contract\*. This makes it possible to import grain and feed by bulk ship in proximity to the industrial park and the construction is expected to contribute to the future economic growth of Myanmar.

\*Full turnkey contract: It is a type of contract in which the contractor is responsible for delivery and performance guarantees at a fixed price for all operations from design to material procurement, construction and commissioning.

