

# Affiliating with Society Efforts to Respect Humanity

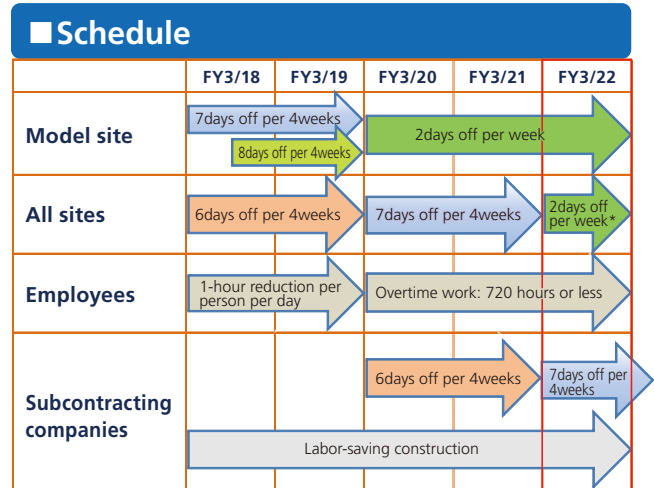
## Work Style Reform

As an advanced company that works on reforming work styles and improving productivity, we are accelerating our company-wide efforts, including overseas branches. We are setting up Work Style Reform Promotion Committee at the headquarters, branches, and international business unit to conduct our Work Style Reforms, which aim to provide workers two days off per weeks, and to initiate productivity improvement needed for the Work Style Reforms.

Due to the amendment of the Labor Standards Act, the penalties related to violating the overtime work limit will be applied to the construction industry from April 2024. We are working to reduce overtime work by improving productivity with the goal of reducing overtime work of employees to a level that meets the upper limit regulations ahead of schedule by the end of FY 3/22.

### Penta-Ocean Construction Group Goals

- Two days off per week by the end of FY 3/22 (\* Eight days off per four weeks for sites with special construction)  
Achieve less than 720 hours of overtime work by the end of FY 3/22
- Establish a flexible work style system by the end of FY 3/21
- A turnover rate of 5% or less for young employees within their first three years after joining the company by the end of FY 3/22
- Support work style reforms for skilled workers



\* Aim to close sites for 8 days per 4 weeks by the end of the fiscal year 2021 (Action Plan for Achieving Two Days Off per Week)

### Achieving a New Way of Working

By the end of FY 3/22, as we aim to reduce overtime work hours per year to 720 hours or less, we are working to improve work efficiency and productivity, and visualize work schedules. Concretely, to save labor in onsite work, we are striving to improve work efficiency by adopting ICT in construction, encouraging clients to digitalize structures, promoting web conferencing, and utilizing iPad apps and WIZDOM. In addition, in order to change each worker's awareness, we implement a campaign for reducing overtime work by 1 hour per day per person, etc.

In April 2020, we established the ICT Promotion Office to advocate the use of ICT to achieve new work styles with social distancing, such as encouraging telecommuting.

### Work Style Reform Support for Subcontracting Companies

We support the work style reforms of subcontracting companies and skilled workers, for example, by promoting the provision of incentives for skilled workers to take holidays to achieve two days off per week (increasing the labor costs when the holiday acquisition target is achieved).

We are also improving payment conditions to subcontracting companies (abolishing drafts and paying cash), promoting the participation in the Construction Career Up (Advancement) System (CCUS), and providing allowances under the excellent foreman system (CCUS members only).

### Mental Health

We are also working on employees' mental and physical health management, for example, by providing consultations by industrial physicians for employees who work a lot of overtime work, and establishing a mental health care system. In particular, to support mental illness, we carry out stress checks of employees once a year for early detection and prevention, and carry out medical examinations and individual guidance by psychiatrists (headquarters medical office).

## Personnel Data

	FY3/18	FY3/19	FY3/20	FY3/21
<b>Number of employees</b>	2,673	2,793	2,893	3,046
(Women in career-track position)	(54)	(79)	(89)	(122)
(Female technical staff among women in career-track position)	(44)	(66)	(76)	(107)
<b>Number of new employees</b>	164	190	192	197
(Women in career-track position)	(23)	(30)	(18)	(30)
(Female technical staff among women in career-track position)	(22)	(24)	(16)	(28)
<b>Number of foreign employees</b>	1,800	1,781	1,600	1,604
(Women)	(432)	(408)	(363)	(371)
<b>Employment rate for persons with disabilities</b> (%)	2.20	2.25	2.66	2.66
<b>Rate of taking paid holidays</b> (%)	52.2	53.1	61.9	51.8
<b>Rate of taking childcare leave (for women)</b> (%)	100	100	100	100

## Promoting D&I (Diversity & Inclusion)

As an advanced company that advocates D&I, we actively hire women and non-Japanese employees. We are working to create an working environment where diverse human resources recognize each other's abilities and benefit from one another. We have established an environment and systems in which diverse human resources can play an active role through recognizing the diversity of nationality, religion, disability, gender, age, sexual orientation, work styles, and values.

As specific numerical targets for D&I, we aim to achieve a female manager ratio of 5% or more, double the number of Japanese female managers, and achieve a new graduate female career-track position employment ratio of 20% or more by FY 3/23.

### Promotion of Women's Empowerment

To create a work environment where women can work comfortably and are empowered, we examine the conditions of the sites where female technical staff are assigned, based on a checklist that includes the installation status of changing rooms, break rooms, toilets, safety supplies, etc. We also carry out harassment training for onsite workers and subcontracting companies.

Senior female staff members regularly conduct interviews with young female staff members to understand their current situation and provide consultations. In addition, we carry out training for young women in career-track position, to share career experiences and role models and to provide information on balancing childcare and work.

### Employment of Persons with Disabilities

The employment rate of persons with disabilities among all employees is 2.66% as of June 1, 2020. Following the spirit of the Act for Promotion of Employment of Persons with Disabilities, we are making efforts to expand the employment of persons with disabilities using satellite offices. We have set up workrooms in Mitaka and Yokohama to create an environment where persons with disabilities can work comfortably.

### Global Personnel System

In FY 3/18, we adopted a personnel evaluation system for foreign workers in Singapore and Hong Kong, which are the major footholds of our international division. In July 2018, we introduced a grading and remuneration system.

The objective of the personal evaluation system is to motivate employees to attain their goals, promote personnel development, and facilitate communication between superiors and subordinates.

The grading and remuneration system boosts the incentive to perform well and achieve goals by reflecting performance and evaluation in the international division in remuneration, and enhances non-Japanese workers engagement in efforts to achieve their individual targets.

### Respecting the Human Rights of Seniors and Utilizing Them

Based on the revised Act on Stabilization of Employment of Elderly Persons, we offer new jobs and new working conditions to all career-track employees and officers who wish to continue working after reaching retirement age.

We also create opportunities for active participation of senior employees, for example, by utilizing senior employees with abundant knowledge and experience as instructors to train young employees at the Safety and Quality Education Center.

### Promotion of Active Participation of Foreign Employees

Every year, we hire about five excellent non-Japanese students, from universities and graduate schools in Japan and ASEAN, who do not speak Japanese as their mother tongue. We are developing human resources who can play an active role in our company both in Japan and overseas, by providing Japanese language education and training for non-Japanese employees after their joining. We hope these students will become engineers who can solve onsite issues, serve to bridge Japanese employees and local staff, and take on managerial positions in the future.

We also established a new personnel system, Global Career-track Position in April 2020, which allows non-Japanese employees to play more active roles.

### Respect for Human Rights

The Diversity Promotion Center established within the Human Resources Department is promoting the creation of a pleasant workplace where each individual respect human rights, to build a basis for promoting diversity.

We are also working to improve our appreciation of human rights by recruiting slogans for respecting human rights and creating posters and leaflets promoting human rights.

## Promotion of Work-life Balance

In FY 3/18, we formulated the Fourth Action Plan for Supporting the Development of the Next Generation, and we are implementing a five-year plan to flexibly balance work and personal life such as childcare and nursing care.

As specific initiatives, we produce handbooks to support the balance between work and childcare and nursing care and consultation sheets for those taking childcare leave. These efforts aim to create an easy atmosphere to take childcare and nursing care leaves, and enhance mutual understanding with the company and bosses about working styles and careers after returning to work. Also, we have systems that allow employees to continue working during childcare and nursing care. These systems include promoting active use of the childcare leave system, the nursing care leave system, and other childcare support systems, and holding discussion meetings among those taking childcare leave.

In 2020, we expanded the system for balancing childcare and work, and established a new system for returning to work (promoting reemployment of retired employees due to childcare, nursing care, transfer of the spouse, etc.).

We are creating an easy atmosphere to take leave, as we require our employees to take five days off in a planned manner annually. We also hold work-life balance seminars to foster awareness of the balance between work and personal life.

### Childcare Leave

We have a childcare leave system so that employees can continue to work even when they have a life event such as childbirth or childcare.

As part of our childcare support system, we have a system that allows shortened working hours and adjusting starting and ending time of the workday (until the child graduates from elementary school at the maximum) to provide an environment where both men and women can easily balance work and childcare.

### Nursing Care Leave and Days-off to Care for a Sick Family Member

We offer a long-term nursing care leave system so that employees who need to take care of their families can continue their work.

Also, if an employee has a family member requiring nursing care or has a child before completing elementary school, needs to care for a family member or a child, the employee can take 6 to 12 days of leave in addition to the annual paid holidays.

### Rate of Taking Annual Paid Holidays

In FY 3/21, the average rate of taking annual paid holidays per employee was 51.8%, and the average number of days of annual paid holidays taken was 9.8 days. In FY 3/18, taking paid holidays on a half-day basis was newly available. In FY 3/22, taking paid holidays on an hourly basis became possible. As a result, employees are now able to take holidays flexibly according to their lifestyles, to lead a fulfilling private life.

# Occupational Safety and Health

Practice with the Highest Priority on Safety and Quality

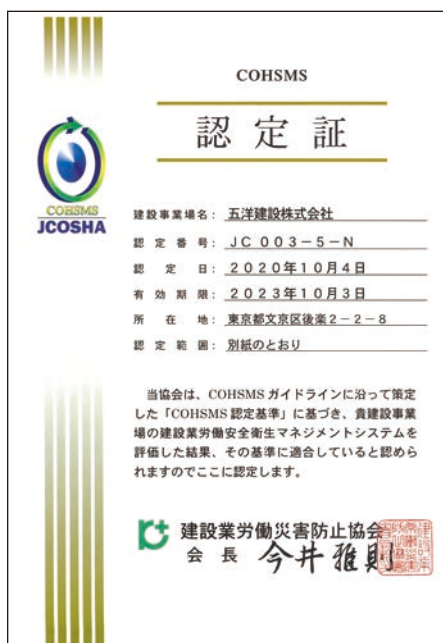
## Health & Safety Activities Guidelines

1. Strive to prevent all accidents as well as industrial accidents, including those involving the public.
2. Prevent occupational diseases and the spread of COVID-19, promote mental and physical health and create a comfortable working environment.
3. Conduct health & safety inspection activities in cooperation with employees and subcontracting companies with an aim to improve the health and safety standards.

### Promotion of Occupational Safety and Health Activities

Penta-Ocean Construction gives top priority to safety in construction work, with the basic policy of respecting each person. We have built an occupational health and safety management system to eliminate and reduce potential accident factors in our business, to promote the health of workers and creating comfortable workplaces, and to improve corporate safety and health standards. We obtained COHSMS Certification from the Japan Construction Occupational Safety and Health Association in 2008, earlier among the construction industry, and are updating the certificate every three years. We have named the certified system as PENTA-COHSMS and have been implementing continuous safety and health management.

We have acquired the international standard for occupational safety and health management systems (ISO45001) overseas, and are working to continuously improve occupational safety and health performance through this system.



COHSMS certificate (Domestic)



ISO45001 certificate (Singapore)

## Central Safety and Health Environment Committee

Under the CSR Committee chaired by the President and Representative Director, we have established the Central Safety and Health Environment Committee as a central organization for safety and health environment conservation activities. This Committee deliberates and decides on basic policies and measures to effectively promote health and safety environment activities.

Additionally, based on an annual plan, we regularly carry out the Central Safety and Health Environment Committee patrol to all branches.

## Efforts to Enhance Communication

Since 1998, we have been promoting a Compassionate and Friendly Greeting Campaign that aims to achieve no accidents and no illnesses, and creating a safe, healthy, and lively workplace culture based on the stronger harmony among people. In particular, we make every construction staff to call each other by name for deepening the sense of fellowship.

## Efforts for Preventing Specific Accidents

We have designated crash and fall accidents and heavy machinery and crane accidents as Specific Accidents to focus our efforts for preventing accidents especially on these accidents. Regarding the prevention of crash and fall accidents, we introduced a Direct Red Card System for Workers Who Do Not Use Safety Belt\*, which suspend a worker from the construction site when he/she is found not using a fall prevention equipment (hereinafter referred to as a safety belt) in a place where safety belt is mandatory. As for the prevention of heavy machinery and crane accidents, we enforced the Zero Heavy Machinery Accident Declaration to reconfirm prohibition of entering a working radius, and to assign guards to prevent any entry. Also, we enforced the Zero Crane Accident Declaration, and for actual measure, we implemented the Exercise 333\*.

\* Workers who were suspended will return to the site after undertaking the safety training again.

\* Exercise 333: (1) 3 m away from the suspended load when slinging. (2) Stop hoisting the lifted load at 30 cm. (3) Roll up after 3 seconds after hoisting the lifted load.

## Efforts to Thoroughly Coordinate and Communicate During Work

We are making efforts to stop unscheduled work by thoroughly contacting and meeting when changing the work schedule. When it is unavoidable, we order to prepare a Record of Meeting for Unscheduled Work and make it known to our staff and subcontracting companies.

## Efforts for Safety and Health in Collaboration with Subcontracting Companies

To ensure quality and safety together with subcontracting companies, we have established the Penta-Ocean Construction Labor Safety Council Association and Labor Safety Councils at all branch offices, and 1,084 subcontracting companies have joined. The Labor Safety Councils are engaged in various activities to improve knowledge and skills related to labor safety, to eradicate accidents, and to build a smooth cooperation between our company and subcontracting companies.

### Examples of Penta-Ocean Construction Labor Safety Council's Activity

#### (1) Safety and health patrol

Based on an annual plan, the headquarters, branches, and subcontracting companies carry out patrols regularly and the President patrols twice a year.

#### (2) Safety and Health Environment Promotion Contest

The headquarters, branch offices, and the Labor Safety Councils are co-sponsoring a Safety and Health Environment Promotion Contest in June, which is the preparation period for National Safety Week held in July every year.

The President and Representative Director attends several Safety and Health Environment Promotion Contests nationwide every year to strengthen efforts for safety and health activities.

#### (3) Implementation of various educational seminars and trainings

Types of educational seminars	Number of seminars conducted	Number of participants
Education of foremen and safety and health managers	8	123
Skill improvement education for foremen and safety and health managers	9	124
Training for Safety officers	2	108

#### (4) Other educational seminars/trainings

Seminars for association seniors, business owner education, risk sensitivity education, etc.



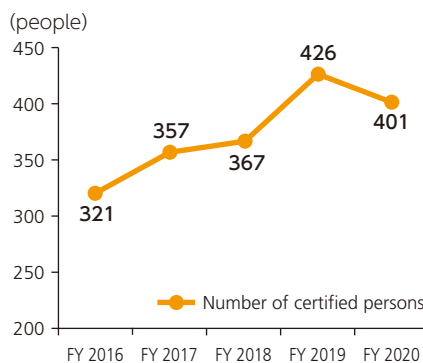
President Patrol (November 2019)

## Foremen's Associations

We organize foremen's associations (organizations consisting of foremen and safety and health managers of multiple subcontracting companies) at each site to raise awareness of safety and health among all workers.

### Implementation of the Excellent Foreman Certification System

Since FY 3/14, we have an Excellent Foreman Certification System to further secure and train future leaders and improve the treatment of construction engineers. In FY 3/21, 401 foremen were certified, and we provided an additional 2,000 yen per day for certified foreman, 1,000 yen per day for foreman who worked more than 100 days a year, and social insurance premiums for the allowance borne by the business owner are paid separately.



## Safety Results

### <Domestic: 4 or more days lost>

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Number of accidents	19	17	21	19	11
Number of fatal accidents	3	1	1	1	0
Frequency rate	0.89	0.77	0.89	0.70	0.59
Severity rate	1.12	0.39	0.44	0.31	0.03
Total working hours (Thousand hours)	21,233	22,033	23,630	27,132	18,589

### <Overseas: 4 or more days lost>

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Number of accidents	15	15	11	3	11
Number of fatal accidents	2	2	0	0	0
Frequency rate	0.27	0.29	0.23	0.07	0.35
Severity rate	0.27	0.30	0.01	0.00	0.00
Total working hours (Thousand hours)	56,467	51,203	48,349	44,598	31,002

\* Numbers are solely from Penta-Ocean Construction

\* Frequency rate indicates the frequency of accidents. Number of fatal casualties due to occupational accidents / total number of actual working hours × 1,000,000

\* Severity rate indicates the severity degree of an accident. Total number of lost working days / total number of actual working hours × 1,000

## ■ Applying the Penta-Ocean Construction Standards in Japan and Overseas

We have been implementing an occupational accident prevention and quality management activities that prioritize safety and quality in Japan and overseas, and named it as the Penta-Ocean Construction Standards. We are diffusing these standards in Japan and overseas and carry out occupational accident prevention activities in collaboration with subcontracting companies.

<Specific efforts>

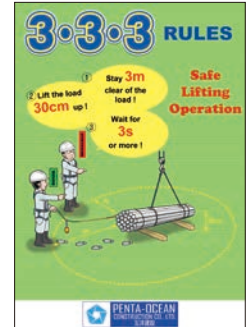
- Holding Special Safety Day (March 30), Safety Contest (1st day of every month), Safety Week (preparation period: June 1-30, the actual safety week: July 1-7) in overseas
- Implementing Penta-Ocean Construction self-regulation and accident prevention activities (Exercise 333, etc.) in overseas



Safety Week disclosure overseas version



Overseas safety patrol



Exercise 333 poster English version

## ■ Designating a Special Day to Pledge Safety

### Special Safety Day (March 30)

On March 30, 2014, a major accident occurred in the Okinotorishima port construction site, killing seven people. Every year on March 30, a memorial service is held with the bereaved families and the client's attendance.

In addition, to not forgetting this accident, March 30 is designated as a Special Safety Day, where we conduct simultaneous onsite inspections to reconfirm safety.

### Fire Prevention Day (April 20)

On April 20, 1998, a major fire occurred at our construction site, with one deceased, 16 people mildly/seriously injured, and one building completely burned down. Taking this accident as a lesson, we designated April 20 as Fire Prevention Day to reconfirm fire prevention measures.



## ■ Safety and Quality Education Center

In April 2018, we established the Safety and Quality Education Center. The Center provides individual education and group education for young staff.

Experienced employees who are familiar with civil engineering, construction, safety, quality, and laws and regulations, provide guidance as an instructor to young employees (from the 2nd to 8th year after joining the company), which number is increasing year by year due to more new graduates hired in recent years. The purpose is to pass on veteran employees' knowledge and experiences to train young employees.

### One-on-one education (individual education)

Tailor-made education customized for each student's needs



As part of the education that supplements on-the-job training in the field, we assess each student's current status and provide education customized for each student's needs and raise their awareness to improve the current situation. By explaining the students' education results to their onsite bosses, on-the-job training will be made more efficient.

### First-Timer series (group education)

Education for conducting an unexperienced work without trouble



We train young employees to make them familiar with types of constructions with no experience from a student perspective. We will provide practical education that can be applied in the field, focusing on showing the field (including photos and videos) instead of relying on classroom lectures.

### Creation of educational videos and publication of educational materials

We support implementing a learning and practice cycle by publishing the educational materials on the company intranet, so the young employees can learn ahead of the process and practice it in the field.



## Measures to Prevent the Spread of the Novel Coronavirus (COVID-19) —Shift to New Workstyles

- The social mission of the construction business is to thoroughly avoid the three Cs (closed spaces, crowded places, and close-contact settings) at construction sites and continue construction.
- The policy of coexisting with the COVID-19 provides us with great opportunities to reform workstyles and improving productivity (by promoting contactless/remote activities and labor-saving technologies) further.

### Details of Efforts

#### Efforts at the Headquarters, Branches, and Offices

##### 1. Promotion of telework

- To keep the ratio of employees coming into office less than 30% under a state of emergency or when a priority measure for preventing the spread of the COVID-19 is effective, and keep that ratio less than 50% under other conditions
- To adopt tools for remote control of PCs
- To promote staggered commuting
- Overseas offices follow the instructions of each national government

##### 2. Development of the office environment

- Classroom style seat layout  
Adoption of the classroom style seat layout at the headquarters, branch offices, and all overseas offices
- Expansion of area per person  
We rent a new office in the vicinity of the headquarters' building, and relocated some divisions of the headquarters, the Tokyo Civil Engineering Branch and the Tokyo Building Construction Branch to the new office, to make the seat layout more spacious

##### 3. Reduction of transportation

- Meetings and training sessions inside and outside the company based on the online meeting system
- Online audit and safety patrol

#### Construction Office (all employees, including those of subcontracting companies) —The Initiatives Have been in Place Since the Declarations of a State of Emergency in April Last Year.

##### 1. Thoroughgoing health and hygiene control

- Body temperature check at the entrance, and restriction of entry of those who feel sick
- Ensuring face mask use, provision of disinfectants, and increase of hand-wash basins

##### 2. Staggered commuting and division of morning assemblies

- Morning assemblies are held several times at different locations

##### 3. To thoroughly avoid the 3 Cs (keeping a social distance of 2m)

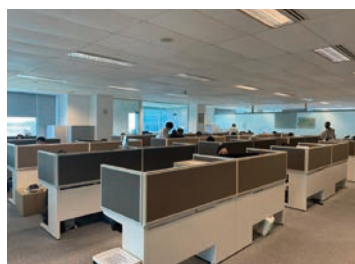
- To hold meetings several times, to minimize the number of participants
- Employees take a recess at different timing
- To enlarge offices, meeting rooms, and resting rooms, to ensure seating arrangement to avoid the 3 Cs

##### 4. To hold online meetings

- To hold meetings with clients and others online
- To promote the remote supervision of clients



Classroom style seat layout in the new office (Tokyo Construction Branch)



Change to the classroom style seat layout (Singapore Office)



Body temperature check with thermo-cameras (on-site makeshift stations for workers)



Classroom style seat layout (on-site meeting rooms)

### Vaccination of Employees, Workers of Subcontracting Companies, and Others Against the COVID-19 (workplace vaccination)

From late June to the middle of October 2021, we conducted workplace vaccination at the headquarters, for mainly residents in the Kanto area. For other branches, too, employees were vaccinated in the workplace vaccination programs held by outside organization.

Amid the spread of COVID-19, we continued construction works while securing the safety and security of on-site workers by implementing measures for avoiding the 3 Cs. We swiftly developed a workplace environment where employees can work safely without anxiety by receiving vaccination and acquiring immunity.



People vaccinated	About 6,300 people • Employees of our corporate group, including temporary staff • Employees of other companies, subcontracting companies, etc. in the same industry, including skilled workers and foreign technical interns • Family members of the above-mentioned people	Vaccine used	Vaccine produced by Moderna, distributed by the government
		Venue	Penta-Ocean Construction Headquarters' Building

# Social Contribution Activities

## Social Contribution Activities Related to the Spread of COVID-19

We provided relief supplies to local governments and organizations that faced difficulties in securing necessary supplies due to the spread of COVID-19.

In Japan, we donated face masks and raincoats as substitutes for protective clothing used by medical professionals to local governments, etc.

Outside Japan, we donated goods to medical institutions (Singapore), relief goods to government-designated quarantine facilities (Myanmar), and rice and cooking oil to the people in need who had difficulty in securing food due to soaring food prices caused by the COVID-19 (Madagascar and Bangladesh).



## Yokohama Ocean Hub Virtual Sea Expo 2020

We participated in an exhibition at Yokohama Ocean Hub Virtual Sea Expo 2020: See and Feel the Sea and Japan Project.

In support of the event concept of deepening one's interest in and understanding of the sea by learning about the various charms and possibilities of the sea, including creatures, leisure activities, ships and environmental conservation, we released an explanatory video titled "Let's take a look at sea construction that require big ships!!" on the exhibition website, regarding large ships used in marine engineering works and our company technology.

This event provided an opportunity for the wider public to learn about the work of marine construction companies by viewing impactful images of ships engaged in marine construction such as seabed drilling and quay construction.



## Eid al-Adha Event Organization

At the Patimban Port in Indonesia, an Eid al-Adha\* event was organized under the joint sponsorship of contractors and consultants, in conjunction with the Islamic event of Hari Raya.

The COVID-19 prevention measures announced by the Ministry of Religion of Indonesia were implemented in the Eid al-Adha event, and the client, the Port Authority and local residents were invited to attend the event.

On the day of the event, the contractor for each package of the Patimban Port Development Project provided cows and goats for the Eid al-Adha event to local residents, and our company provided cows.

This event helped us build a friendly relationship with the local community.



\*Eid al-Adha: an Islamic religious event where animal offerings are provided to the poor people in local communities

## Love Beach System "Ehime Beach of Connection"

The "Love Beach System" is part of the Ehime Prefecture Public Civil Engineering Facilities Protection Project, which recruits volunteers from residents' groups, coastal conservation groups, NPOs, enterprises, etc., to clean up certain areas of coastal and harbor green spaces managed by the prefecture. The project is aimed at creating a beautiful coastal environment through the consensus and cooperation between the government and local residents.

Our company endorses the objective of the initiative and is registered as a "Love Beach Supporter." This fiscal year, our company conducted a total of five clean-up activities on the Tateiwa Kaigan Fuwari Beach.

By continuing these activities, we will be contributing to the creation of a beautiful coastal environment.



## Conducting Beach Cleanup Activities in the Pengerang District

For the Phase 3 PDT land reclamation and jetty construction in Malaysia, we conducted clean-up and volunteer activities to collect plastic waste that washed ashore along the coast around the construction site, for the purpose of landscape preservation and environmental conservation.

About 480 people, including the client and contractors, participated in the cleanup activities.

Through these activities, we contributed not only to the beautification of the marine environment but also to the raising of environmental awareness in the region.



## Appointment Ceremony for One Day Fukushima Coast Guard Chief and Other Posts (FY 2020 Zero Marine Accidents Campaign)

At Onahama Port in Iwaki City, Fukushima Prefecture, an Appointment Ceremony for One Day Fukushima Coast Guard Chief and Other Posts was held by the Fukushima Coast Guard Office as part of its Zero Marine Accidents Campaign (July 16-31) where Momoko Sato, a member of our company's Onahama dredging project office, was selected as the Captain of a patrol vessel for a day.

This year, instead of Hula Girls who have been called in every year thus far, three staff members from corporate offices located in Onahama were appointed as One-Day Coast Guard Chief, One-Day Chief Onahama Port Chief and One-Day Captain of a patrol vessel.

The three staff members wearing Coast Guard officers' uniforms visited nearby maritime companies and other organizations to call on them to help prevent marine accidents, and played a part in educational activities to prevent marine accidents.



## Received External Awards

### Received the Tunneling Project of the Year in the NCE Construction Work Awards (up to \$500 million)

On December 17, 2020, the MTR Shatin to Central Link Contract No.1121 constructed by the Penta-Ocean - China StateJV, which is represented by our company, was awarded the Tunneling Project of the Year (up to \$500 million) by the New Civil Engineer (NCE), an organ of the British Institute of Civil Engineers. The joint award was given to the client (MTR Corporation, Hong Kong), the consultant (Arcadis, Netherlands) and the contractors (Penta-Ocean - China StateJV).

The examination was conducted by a team consisting of 30 experts from industry, government, and academia, who carefully examined the 6 construction projects that passed the first screening and then selected the winner of the Project of the Year. The reason for winning the award was that practical problems were solved and construction was carried out by optimizing the original design through technological innovation, in cooperation with the client and all the other parties concerned. The project was recognized as a practical example of expanding the possibilities of tunnel engineering.

As part of the new Hong Kong subway line, this project was to construct an undersea tunnel connecting the Hung Hom District of the Kowloon Peninsula and the Causeway Bay area of Hong Kong Island across the Victoria Harbour, located in the heart of the city, by connecting 11 immersed tubes. The Early Contractor involvement (ECI) system was adopted for discussions about the design and construction contents between the client and the bidding participants from the bidding stage. This was the first such project by MTR Corporation. The adoption of the ECI system led to active discussions among engineers from various backgrounds (nationality, experience, the client side, the contractor side, etc.), resulting in efficient design and construction.



### Received the Best Poster Award at Coastal Dynamics 2021

On July 9, 2021, Mr. Kevin Bobiles, an employee of the Design and Engineering Division, Civil Engineering Business Unit of our company, was awarded the Best Poster Award for the best presentation among 60 posters in the poster presentation held at Coastal Dynamics 2021 (Coastal Dynamics Society 2021).

The Coastal Dynamics Conference Series is an international conference held once every four years on the theme of "Shaping the Future of our Coasts" where researchers and practitioners from around the world present insights and research into how nature and humans shape our present and future beaches.

Mr. Bobiles presented the results of field measurements and numerical analysis of wave and tidal current interference in and around Matarbari Port, where our company is currently carrying out port construction and land development projects as part of the "Matarbari Ultra-Supercritical Coal-Fired Thermal Power Project," the most important national project in Bangladesh. The report contained research results useful for the port operation and future planning of Matarbari Port, such as the effect of wave and tidal current interferences on the stability of breakwaters.



### Minister's Award and Certification of Engineers Engaged in Overseas Infrastructure Projects by the Ministry of Land, Infrastructure, Transport and Tourism

On March 24, 2020, at the "Commendation for Overseas Infrastructure Projects by the Minister of Land, Infrastructure, Transport and Tourism," organized by the Ministry of Land, Infrastructure, Transport and Tourism, Mr. Tsugunari Suzuki, Executive General Manager of the International Civil Engineering Divisions Group and Deputy Head of the Hong Kong Branch Office of our company received the Minister of Land, Infrastructure, Transport and Tourism Award, and Ms. Kyo Fujioka, Senior Staff Member of Construction Engineering Division, International Building Construction Divisions Group, received the Minister of Land, Infrastructure, Transport and Tourism Incentive Award.

The "Commendation for Overseas Infrastructure Projects by the Minister of Land, Infrastructure, Transport and Tourism" is a system that recognizes the achievements of engineers of Japanese companies engaged in overseas infrastructure projects and recognizes those who have produced particularly outstanding achievements, with the aforementioned awards being the first ones.

In total, 708 engineers were certified and more than 10% (73) of the engineers certified were from our company. In the future, based on this certification, it will be possible to register each of such achievements in Japan's Construction Records Information System (CORINS).

The Minister of Land, Infrastructure, Transport and Tourism Award and the Minister of Land, Infrastructure, Transport and Tourism Incentive Award recognize particularly outstanding engineers among those who have received certification. 28 engineers (17 for the Minister of Land, Infrastructure, Transport and Tourism Award, 11 for the Minister of Land, Infrastructure, Transport and Tourism Incentive Award) received the awards.

Ms. Fujioka expressed her joy as representative for the recipients of the Incentive Award, saying, "I want to continue to promote Japan's advanced technology overseas and contribute to development, both in Japan and overseas."



### Received the Certificate of Appreciation for "Restoration Work in Satozuka District, Kiyota Ward, Sapporo"

On December 25, 2020, a ceremony was held at the Kiyota Ward Office in Sapporo to present a certificate of appreciation for the restoration work in Satozuka District, Kiyota Ward, Sapporo. The Chairman of the Satozuka Central Committee for Disaster Reconstruction and other representatives attended the ceremony and received a certificate of appreciation from the Mayor of Kiyota Ward in the name of the governor of Sapporo. The certificates of appreciation were presented to Mr. Kajimoto, Head of the Sapporo Branch Office as representative of the special JV of Penta-Ocean and Ito, Mr. Suzuki as an individual commendation, and Mr. Baba, Head of Itogumi Construction Co., Ltd., which is a constituent member of the JV.

In the Satozuka district of Kiyota Ward, which was severely damaged by the 2018 Hokkaido Eastern Iburi Earthquake, we worked hard for early restoration and were highly praised for the smooth progress of the construction and its great contribution to the continuance and reconstruction of the local community. We received many words of appreciation from the participants.

This was a difficult project to carry out as it involved ground reinforcement in areas that were damaged by the severe earthquake, such as soil liquefaction, while residents were living there, but the project was successfully completed through good communication with local residents.

