# Construction in Japan East Japan In-house Company



Under the basic operational policy of "Build a robust foundation for the future to become a company that can keep pace with changes in the times," we have established and are pursuing a business strategy which leverages the technologies we have cultivated and facilitates further development that will connect

#### Noriyuki Hosaka

### **Overview of East Japan In-house Company**

The East Japan In-house Company is an organizational framework covering North and East Japan, as shown on the map to the right. We have great expertise in the repair and reinforcement or seismic retrofitting work of a broad range of road structures and buildings. We also have a specialist company under our umbrella (Kyna-Tech) that possesses unique core technology of a high-frequency core drilling method, which is 2.5 times faster than conventional method. It plays an active role in projects both within and outside the Group. We have also started building a framework for carrying out high pressure water jet work as a new business area

Some of the areas we cover experience heavy snowfall, so in order to keep sales steady, we need to be strategic in how we accept orders, such as taking on large-scale urban construction projects and orders from local governments and the private sector to offset the suspension of work on expressways in these regions during the winter.

We strive to take on difficult large-scale expressway construction projects in urban areas as a joint venture with bridge manufacturers. In addition to securing profits, we engage in these projects to improve the technical abilities of our young engineers. Also, as the number of large-scale projects we receive is growing, we are using the Tsukuba Training Center and other resources to cultivate the employees of partner companies as well.

| 54 · *                               | S   | Business Locations /  |
|--------------------------------------|---|---|
|                                      |   | East Japan In-house Company<br>390 employees  |
| °0 l                                 | SHO-BOND CORPORATION  | Group Companies   |
| Kita-Nihon<br>Regional Office        | Hokkaido Branch<br>Minami-Tohoku Branch<br>Kita-Tohoku Branch   | TOHOKU KAKO<br>CORPORATION  |
| Shutoken Hokuriku<br>Regional Office | <ul> <li>Tokyo Branch</li> <li>Chiba Branch</li> <li>Kanto Branch</li> <li>Hokuriku Branch</li> </ul> | KAKO CORPORATION<br>KANTO KAKO<br>CORPORATION<br>YOKOHAMA KAKO<br>CORPORATION<br>NIIGATA KAKO<br>CORPORATION<br>Kyna-Tech |
|                                      | 7 branches  | 6 group companies   |

# Construction Orders and Net Sales

We take on construction orders from expressway companies, national and local governments in a well-balanced manner. In particular, we receive a lot of orders from local governments in the capital region, including the Tokyo. In regard to expressway construction, we have been driving growth in orders since FY2022, after the Tokyo Olympics. We have also been trying out new technologies through joint ventures with partners, including major construction companies and bridge manufacturers.

### **Construction Orders: East Japan In-house Company**



### **Construction Sales: East Japan In-house Company**



## Main Initiatives

In order to build a foundation for the future, we think it is important to cultivate people, both our own employees and those of partner companies, so we are focusing our energy on safety initiatives and the development of human resources.

### Creating a Safety Culture

We have formulated an action plan for creating a safety culture within the in-house company and we are implementing initiatives in accordance with this plan.

This includes making communication the highest priority, so we are implementing measures for enhancing both organizational and individual capabilities of ensuring safety on construction sites. Specifically, we are working to deepen mutual understanding between the in-house company, our employees, and partner companies by carrying out conversation-based patrols and issuing in-house newsletters.

#### Empowering Female Engineers and Non-Japanese Employees

We are actively employing female engineers at construction sites and some of them take a lively part in on-site jobs balancing work and family life. Currently, we have nine female engineers on staff, one of whom is non-Japanese.

We are also actively working to recruit and develop non-Japanese human resources so that we will be able to respond to future changes in the business environment. We have already launched an initiative to recruit non-Japanese engineers and we are actively engaged in developing them, including at partner companies. This development is not only being carried out through on-site instruction, but also through measures such as educational support that enables them to gain official Japanese qualifications.

| Non-Japanese employees recruited (2020 to present) | 2 |
|--|---|
| Non-Japanese employees in training                 | 7 |
|  |   |

Note: As of June 30, 2022

### Topics

### **Dispatching Instructors to the Tsukuba Training Center**

As part of our human resource development efforts, we have dispatched more than 10 veteran engineers to act as instructors for construction management training aimed at less-experienced employees and workers from partner companies. The in-house instructors are leveraging their experience to create their own courses and study programs and these have been well received by the trainees.

### **Recycling Work Clothes and Helmets**

We are carrying out an initiative for recycling unneeded work clothes, helmets, and other equipment. The clothes, helmets, and equipment collected at each of our business locations are put to good use as an industrial resource. FY2022 Collection Results (East Japan In-house Company)

Work clothing: 298 pieces Helmets: 27 Other (cold weather protection, etc.)

### In-house Newsletters

Each of our regional offices creates its own in-house newsletter. The Kita-Nihon Regional Office's newsletter has been named Eco-Hiiki (Eco Promoter) and includes content that aims to strengthen ties with partner companies. The Shutoken Hokuriku Regional Office's newsletter is called Anzen Dayori (Safety News) and it aims to inform staff of revisions to laws and regulations and foster a strong awareness of safety in accordance with in-house rules. We will continue to issue newsletters as a tool for fostering communication within the in-house company and with partner companies.





A non-Japanese employee and female engineers





# **Construction in Japan** West Japan In-house Company



At the West Japan In-house Company, we aim to achieve further growth by positioning "maintaining rowth," "employee education," and "strengthening our base" as priority issues. Accordingly, we will strengthen our foundation through investment in people. When we receive orders for large-scale a proper workforce framework and personnel allocation.

### Tsuyoshi Koga

### Overview of West Japan In-house Company

The West Japan In-house Company comprises three regional offices (Chubu, Kinki, and Nishi-Nihon) and each of these regional offices is affiliated to the Kako Group companies. We operate over a wide area covering South and West Japan.

Each branch of SHO-BOND CORPORATION primarily undertakes general construction contracts with a focus on large-scale projects. The Kako Group companies receive orders from national and local governments taking advantage of being based in the district, as well as undertake subcontract work from major construction companies. We ask our partner companies to take on work within the in-house company on a cross-regional basis and these partners are playing an important role in strengthening our overall construction framework.

When taking on large-scale projects, we compile information from each region under the company's area, while cooperating with the head office, such as anticipated expressway construction orders and personnel information, so that it is available on the in-house company-wide basis. For human resources development, we approach skill improvement from a peculiar perspective. We carry out a questionnaire of all young trainees in advance and then plan experience-based training programs that cover topics identified through the results.

|                                | S C C C C C C C C C C C C C C C C C C C                                     | Business Locations /<br>Area<br>West Japan In-house Company<br>378 employees             |
|--------------------------------|---|--|
| 01                             | SHO-BOND CORPORATION  | Group Companies  |
| Chubu<br>Regional Office       | <ul> <li>Nagoya Branch</li> <li>Shizuoka Branch</li> </ul>                  | CHUBU KAKO<br>CORPORATION  |
| Kinki Regional Office          | <ul> <li>Osaka Branch</li> <li>Kyoto Branch</li> <li>Kobe Branch</li> </ul> | KANSAI KAKO<br>CORPORATION   |
| Nishi-Nihon<br>Regional Office | Chugoku Branch<br>Shikoku Branch<br>Kyushu Branch                           | CHUGOKU KAKO<br>CORPORATION<br>SHIKOKU KAKO<br>CORPORATION<br>KYUSHU KAKO<br>CORPORATION |
|                                | 8 branches  | 5 group companies  |

## Construction Orders and Net Sales

We actively undertook large-scale construction orders from expressway companies to advance the Group's aims of taking on larger construction projects and leveling off operation. We have even taken on two large-scale construction contracts with an initial value in excess of ¥7 billion. In addition to building a construction framework suitable for handling large-scale projects, we have been improving the gross margin of construction work under strict cost control.

### **Construction Orders: West Japan In-house Company**



### **Construction Sales: West Japan In-house Company**



## Main Initiatives

In order to further enhance the Group's strengths and accelerate growth, we are working on upgrading the order receipt strategy and more activities for large projects and construction work capability (the targets of the current Medium-term Business Plan). At the same time, we are advancing the following initiatives to develop human resources and establish a robust safety culture.

### Utilizing 3D-CAD at Construction Sites

We are gradually introducing 3D-CAD to construction sites in order to raise productivity and guality and to visualize construction processes. 3D models enable users to check the condition of a structure from various angles, and they can be used to improve construction quality by discovering inconsistencies between drawings and the actual structure, as well as by identifying any points of interference between newly added members and the existing structure. Issues can be solved before work even begins by using 3D model simulations at the design stage. This contributes to making construction processes more efficient and to raising productivity. It is also possible to use 4D models, which are 3D models with a time axis added, at the same time. This enables the visualization of the entire construction process, from the pre-construction stage to completion, facilitating a shared awareness among large numbers of people. In terms of safety, 4D models can also be used to check each step of a work process in advance to understand and predict potential hazards, thereby enhancing safety.

### Unique Communication that Improves Safety and Team Unity

The Nishi-Nihon Regional Office has started sending all team members Komachi Tsuushin, which are communications aimed at improving safety awareness. Female administrative staff, who usually stay at office, use social media to send safety awareness messages to construction sites every Monday. This raises their interest in the sites and fosters greater unity among the entire team, including administrative departments. At the same time, the regional office's Safety Management Section is sending Safety Alerts that inform workers of potential onsite hazards identified from the weekly construction schedule as a way to encourage the sharing of information and realize a greater alertness to danger among all employees. Through these daily initiatives, we aim to foster an organization-wide

safety culture by facilitating communication and building trust.

### Training for Young Employees

As a leading company for repair and reinforcement work, we position human resource development, particularly the development of young employees and passing down of skills, as an important issue. We are focusing on developing young engineers by leveraging the experience of senior employees in construction, sales, and engineering departments to implement experience-based training programs. Content includes operational methods used at construction sites and ways to solve technical issues. We are also actively working to further advance this training by incorporating environmental improvements (including DX).



A 3D model simulation

The actual completed structure





An experience-based training session



# Various Repair and Reinforcement Construction Projects

### Expressways

### Large-scale Expressway Renewal and Repair Project

There are many structures that have been in use for over 50 years and as they age, damage and deformities of these structures are becoming apparent. Therefore, expressway companies are launching the large-scale renewal and repair project in order to restore these structures to their original state and even enhance performance and functionality, thereby ensuring the long-term soundness of the expressways. One of the main characteristics of renewal work is that it has a large impact on society because traffic needs to be restricted and sometimes detours are set up for long sections of road during long construction periods. Also, construction on expressways in urban areas is often difficult due to restrictions such as limited working space where the expressway passes directly over a major arterial road.

### PR Representative for Expressway Renewal Work

Expressway renewal work is carried out on a section of a major transportation network so it has a considerable effect on society. Therefore, we work to gain the understanding of road and transportation administrators regarding the importance of renewal work, and request their cooperation with publicity activities aimed at regular road users, including by posting notices of construction work on electric signs and distributing leaflets. We also open sections of our construction sites to visitors such as the press and educational institutions in order to communicate the current status of social infrastructure to wider society and promote the importance of renewal work.

### Passing on Social Infrastructure to Next Generation

Due to the social importance of expressways, carrying out construction work while they are in operation involves various restrictions, including in terms of safety and scheduling.

Advancing construction on a structure involves a wide range of different organizations, such as the organizations managing the roads leading in and out the section of road and other roads that run alongside it. Coordinating all these organizations requires a great deal of time. Despite these difficult conditions, once work has been safely completed and the structure is in sound condition for use, it becomes social infrastructure that can be passed on to next generation, which is enormously satisfying.



Renewal work underway

### Local Governments

### Overview of Construction Works for Local Governments - The Repair of Mino Bridge as a Case Study

There are approximately 730,000 bridges in Japan and about 90% of these are managed by local governments. Mino Bridge is a 116-meter-long steel stiffened suspension bridge which crosses the Nagara River in Mino City, Gifu Prefecture. It started service in 1916, giving it significant historical and technological value as Japan's oldest modern suspension bridge. We were able to participate in the repair of the valuable bridge. Although the contract for this project was with Mino City, as the bridge is an Important Cultural Property, construction was carried out under designs and supervision by the Japan Cultural Heritage Consultancy, a design company entrusted with the project by the Agency for Cultural Affairs.

### Unravelling the History

This project was the first large-scale repair work carried out on Mino Bridge since its designation as an Important Cultural Property. When checking the specifications of the steel parts, one of the main themes of the Japan Cultural Heritage Consultancy's work was checking the roots and repair history of each member of the structure. We actively contributed to these investigations. The investigation was a success, with the results revealing that the initial steel members that are still in use today were manufactured at the Imperial Steel Works in Yawata.

### Receiving Double Awards

As an Important Cultural Property, the bridge needed to be repaired without any changes to its original form under the Act on the Protection of Cultural Properties. Therefore, during the work we had to be extremely careful, keeping records of the position of every member that was removed and the diameter of each rivet, as well as carefully sorting the separated members by type and organizing them in a way that made it clear where and how it should be reattached. This required a large amount of time and manpower, but we were able to repair and restore the bridge without losing any of its value as a cultural property. As a result, the Group received double awards for the first time in our history, the Japan Society of Civil Engineers' 2021 Tanaka Award (Renovation Category) and a 2021 Japan Construction Engineers' Association Award.



Mino Bridge (Photos: Japan Cultural Heritage Consultancy)

### Ministry of Land, Infrastructure, Transport and Tourism

### Measures for Building National Resilience

The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) is carrying out many projects under its Fundamental Plan for National Resilience, including measures to tackle aging infrastructure and strengthen seismic functions. We are engaging in these projects, primarily for seismic strengthening work. We are focusing on tackling these projects not only from a technical perspective, but also by raising efficiency and productivity through the introduction of construction DX. We are actively incorporating measures for improvement of construction industry advocated by MLIT, and in FY2022, we were evaluated highly by the ministry and designated as a company of excellence in construction by its several regional offices.

### Maintaining and Managing Structures through Cooperation with Bridge Doctors

In order to extend the service life of highway bridges. MLIT has established the Bridge Doctor system, which aims to apply technical guidance and advice from experienced academic experts to infrastructure maintenance. We helped this initiative by the attachment of sensors that continually monitor the damage situation of a bridge and initial data collection. We are also participating in social infrastructure maintenance and management projects operated through industrial-governmentalacademic partnerships.

### Private Sector and Others

### Work on Private Sector Structures

We provide a one-stop service that delivers solutions to issues such as damage to harbor facilities and buildings caused by aging, revisions to laws and regulations, damage from natural disasters, and changes to a structure's purpose. This service covers everything from investigations and diagnoses to design and construction work. In our construction efforts, we have raised the value and extended the service life of the buildings we have worked on by making them safe, secure, comfortable, and resilient to disasters. We have also contributed to conserving Japan's beautiful cultural heritage by participating in the renovation of historic buildings.

### Valuing Relationships of Trust with Customers

We take a wide-ranging approach to the private sector customers of our group companies and other partner companies, and if any issues arise, we go to the site to survey the actual situation and offer a variety of solution proposals. By building in-person relationships with customers in this way, we are able to detect any issues at an early stage, contributing to extending the service life of facilities. The relationships of trust we build with our customers are long-lasting, including providing maintenance and operational management support after renewal work has been completed.

### The Difficulty of Construction Work On What is Already There

Seismic strengthening work involves attaching aseismic devices using anchor bolts, so there is a risk that boring will damage important members within a structure. There are many instances when construction cannot go forward according to the original contracted plans because the interior of the existing structure is not visible. As a company specializing in maintenance, coming together and leveraging our ingenuity to overcome successive problems like these is worthwhile work. In FY2022, we received several awards from regional offices of MLIT due to our efforts in this area.



An inspection by a Bridge Doctor

### Combining Construction with Service

A large proportion of renovation works are carried out while a facility is still in use, so we take a customer-first approach. Compared to new construction, renewal work requires that more attention is paid to curtailing public nuisances, such as vibrations and noise, and controlling waste emissions, and there are many other challenges, including a tendency toward longer construction schedules.

Despite such difficulty, we work closely with our customers to ensure that construction moves forward without issue and that we can safely hand over the completed structure. Seeing our customers using their renovated buildings brings us the greatest joy.



Reinforcement work in progress

# Manufacturing and Sales of Construction Materials SHO-BOND MATERIAL CO., LTD.



Ve are contributing to maintaining and updating social infrastructure by supplying products with excellent mance in relation to cost that can meet customers' needs and earn their trust. We work to build frameworks for safe and efficient production activities, highly reliable quality assurance activities and the

### Shigeru Naraoka

CHO-BOND MATERIAL CO., LTD.

# Overview of SHO-BOND MATERIAL CO., LTD.

SHO-BOND MATERIAL CO., LTD. is a core Group company that engages in the manufacturing and sales of construction materials. We were established in July 2016 through the merger of SHO-BOND Chemical and SHO-BOND Coupling to become both a manufacturer and seller of resin products, construction materials and pipe joints. We produce new construction materials and methods that accurately respond to changes in the maintenance market and the needs of our customers by combining chemical and civil engineering technologies within a comprehensive framework spanning from design and development through to manufacturing and sales. The product improvement and new construction method ideas we gain from hundreds of SHO-BOND CORPORATION construction sites across Japan are the driving force behind our product development capabilities. We continuously evolve our resin products and construction materials alongside construction sites and boast a broad lineup of products tailored for the various effects of deterioration and damage that afflict structures.



## Activity Report

### Diversifying Product Sales Methods

In February 2022, we independently acquired a construction license in order to expand sales of new products and meets customer requests that we carry out work onsite. This has enabled us to take on construction service contracts so that we have been accepting construction orders that incorporate sales of our products. In particular, we had been having trouble growing sales of CPJ-L, a concrete with a low-elasticity latex and ability to harden very quickly that we added to our lineup in October 2020, as it was difficult to meet customer needs through just product sales. However, being able to mix and apply the product onsite ourselves using a specialized mixer has led to a large increase in sale volumes. Furthermore, we are also able to leverage our advantage of selling adhesives for pouring concrete to construction joints. Going forward, we will develop sales of products paired with onsite construction across Japan.

### 2 Stainless Steel Mechanical Pipe Joints (Straub Pipe Couplings)

We have been manufacturing and selling Straub couplings for 40 years, from 1982 to 2022, as mechanical pipe joints for air conditioning and sanitary equipment piping. Over this period, we have developed lightweight, improved fastening, high pressure-resistant, and other products in response to numerous requests from our customers. These have greatly pleased workers and clients on actual construction sites by saving labor and shortening construction schedules. We will continue striving to meet the expectations of our customers.

As a measure to grow sales in new fields, we have jointly developed a fire-resistant coupling for flammable gas pipes with the Japan Gas Association and five gas companies, and this is now being launched to market. The product has been highly evaluated by gas-related work sites and has received the Japan Gas Association's 2022 Award for Engineering in recognition of its excellent workability. Also, our couplings are made from stainless steel, giving them long service lives and semi-permanent recyclability. This contributes to lowering environmental impact, including reduction of industrial waste and CO<sub>2</sub> emissions.



Construction site (CPJ-L)



Example of a Straub pipe coupling (Straub Grip G-type)

# **Overseas Businesses** SHO-BOND & MIT Infrastructure Maintenance Corporation

SHO-BOND & MIT Infrastructure Maintenance Corporation (SB&M) combines SHO-BOND's technological capabilities with the network and business development capabilities of MITSUI & CO., LTD. (Mitsui) to provide solutions using SHO-BOND's technology for infrastructure and private facilities owned and managed by customers in Japan and overseas. The company builds and develops new business foundations for the SHO-BOND Group and promotes activities that create a safe and secure social environment.

## Overview of SB&M

SB&M was established in April 2019 with a 51% investment by SHO-BOND Holdings Co., Ltd. and a 49% investment by MITSUI & CO., LTD. It is the first joint venture company in the history of SHO-BOND. A total of nine employees seconded from both companies work together to develop new businesses in cooperation with SHO-BOND Group companies and Mitsui. The company's business represents a new challenge for the SHO-BOND Group. We are working to create new business areas both in Japan and overseas.

In November 2020, the company established a joint venture company (CPAC SB&M Lifetime Solution Co., Ltd.) with the Concrete Products and Aggregate Co., Ltd. (CPAC), a subsidiary of the Siam Cement Group (SCG), a major conglomerate in Thailand, to develop infrastructure maintenance business in Southeast Asian countries starting from Thailand.

SB&M is working to expand sales of products and construction methods, listening to structural maintenance issues of customers in Japan and overseas and taking a problem-solving approach. Based on SHO-BOND's technology, the company handles a wide range of products, including structural repair resin, earthquake-resistant equipment and expansion equipment for bridges, and various pipe joints. It also introduces high-quality repair products from overseas into Japan

At the Thai joint venture company, two seconded employees are currently playing a leading role to transfer SHO-BOND's technology. Thailand is experiencing a stage where aging infrastructure issues are beginning to surface. We are conducting educational activities to raise maintenance awareness and sales activities to show maintenance benefits from the perspective of life cycle costs. SB&M cooperates with SHO-BOND Group companies to support local businesses

The company is also considering the development of new overseas businesses to contribute to other countries by exporting the technologies and knowledge it has cultivated and gained in Japan.



# Activity Report

### Taking Advantage of the Joint Venture's Strengths to Move Forward Despite the COVID-19 Pandemic

In FY2022, SHO-BOND and Mitsui, as well as SB&M and CPAC, worked together both in Japan and overseas to advance business while leveraging their respective strengths.

Travel and behavioral restrictions during the protracted COVID-19 pandemic significantly impacted our Thai and other overseas businesses. Even seconded employees of the Thai joint venture company could not visit sites or customers. However, we utilized web meetings connecting multiple locations and developed sales operations by exchanging ideas between local and Japanese employees. We also secured repair projects for ports and cement factories with the support of the sales network of SCG, CPAC, and MITSUI & CO. (THAILAND) LTD.

Similarly, overseas business development in countries other than Thailand has made steady progress through the Web, taking advantage of Mitsui's overseas network of offices in 62 countries worldwide.

While overseas businesses faced difficulties, our sales activities in Japan increased even under behavioral restrictions. We have been getting more and more positive feedback by responding flexibly to customers' needs, for example, by conducting online sales to new customers through Mitsui's network and repeating site visits to lead up to mockup (trial construction) and product sales. SB&M will continue to make steady progress toward business growth by leveraging the strengths of a joint venture and combining the capabilities of the Group and its partner companies.





Scenes of operations in Thailand



A port repair site in Thailand

# Research and Development Technical Research Institute

As a leading company in the structure maintenance business, we are contributing to realizing a safe society through our advanced technological development capabilities. Our development themes are based on the diverse needs of customers in various fields and our construction sites. In cooperation with public and private research institutes, we use open innovation research and development methods to enhance the results and speed up the process.

# Overview of Technical Research Institute

The SHO-BOND Group has contributed to society through the research and development of its own repair technology, believing that the combination of chemical and civil engineering technologies is important for effective infrastructure maintenance. Technical Research Institute played a central role in this effort. In 1996, the year after the Great Hanshin-Awaji Earthquake, SHO-BOND opened its third research laboratory (with a site area of approximately 22,000 m<sup>2</sup>) in Tsukuba Science City. We named the institute the Technical Research Institute based on the philosophy of raising repair skills to the level of scientific research. The institute focuses on clarifying the mechanisms of structural deterioration and damage, improving fatigue durability against large vehicles, and researching and developing effective reinforcement technology for earthquake disasters. The research facility specializing in the repair and reinforcement of structures and equipped with a lot of state-of-the-art equipment is unique in Japan, and many materials and construction methods developed have been adopted as standards for repair methods. The research staff consists of researchers with backgrounds in chemistry (organic materials) and civil engineering (inorganic materials and structures).



Aerial view of the Technical Research Institute and Tsukuba Training Center

Example of EPMA analysis

# Various Research and Development Themes

In recent years, we have been working on the following research and development themes:

- Concrete coating methods with few work processes that can be easily conducted by non-skilled workers, and one-pack type coating materials that are easy to handle
- A method to ensure that anticorrosive agents for reinforcing bars penetrate from the surface of the concrete to the interior as a preventive maintenance to be applied before the deterioration of structures
- Special anchors for adhesive injection and special concrete placing systems for the surface replacement to repair deck slabs that have deteriorated significantly due to repeated heavy traffic loading

In addition to these themes, we are constantly conducting research and development on several other themes.

In February 2022, the Institute received the Special Award at the First Infrastructure Maintenance Awards from the Japan Society of Civil Engineers (JSCE) for its longstanding research and development activities that have contributed to the development of infrastructure maintenance.

SCE Infrastructure Maintenance Awards website (Japanese version only)

https://inframaintenance.jsce.or.jp/hyousyou/announcement1/



Bending test of deck slabs repaired by resin injection



Received the Special Award at the First Infrastructure Maintenance Awards from JSCF

# Cooperation Among Divisions and Group Companies

Led by the Engineering Division, which gathers information on issues faced by customers and the Group, the Group conducts research and development at the Technical Research Institute and commercializes products at SHO-BOND MATERIAL CO., LTD.



## Development Examples

## A High-performance Anti-falling Method with Excellent Transparency (SHO-BOND New Clear Cloth Method)

With the aging of infrastructure constructed during the period of high economic growth, concrete pieces falling from elevated bridges and other structures have become apparent, and anti-falling measures have been implemented. In addition, since the Sasago Tunnel Ceiling Collapse, inspections have become mandatory every five years, and facility managers are required to conduct a close visual inspection. For this reason, there is a need for a method that allows direct visual inspection of concrete conditions even after anti-falling measures are implemented, but the transparency has been insufficient with existing methods

To meet this demand, we have developed a high-performance anti-falling method that is transparent and has excellent visibility of the substrate. The method combines excellent transparency with load-bearing performance and deformation performance to support falling objects and demonstrates sufficient performance even in the temperature range of -30 to 50°C. We expect this method will contribute to the maintenance and management of concrete structures and the prevention of third-party damage.

### 2 Life Extension Methods for Small and Medium-sized Bridges (CPJ-L, SBJT, and SB Primer)

Small and medium-sized bridges are important infrastructure for community roads regardless of their traffic volume. However, they are often managed by local governments lacking both financial and human resources, requiring general-purpose construction equipment, workability, and economic efficiency. To meet these needs, we have developed life extension methods that satisfy these requirements and provide sufficient durability. This method involves removing the existing pavement from the concrete deck slab, applying a highly permeable primer (SB Primer) and an adhesive for jointing (SBJT) to the top surface of the concrete deck slab, and then placing paving and reinforcement material, a low-elasticity latex modified fast curing concrete (CPJ-L) mixed with a small mixer. The main material, CPJ-L, has various features, such as fast curing that leads to a shorter road closure time, durability, and load resistance. We expect it to become an effective tool for local governments to promote longer bridge life.

# 3 AI-based Repair Design Productivity Improvement System (AI Sindanshi\*)

Traditionally, causes of deterioration of concrete structures have been identified based on detailed site investigation and material analysis results of samples taken from deteriorated parts. In addition, the repair method had to be selected from various choices corresponding to the identified causes of deterioration according to site conditions.

As a tool to improve the productivity of this process, we have developed an artificial intelligence (AI) system for diagnosing deterioration and selecting repair methods (AI Shindanshi). The basic system is constructed by deep learning by AI based on abundant in-house repair work examples. The system enables the identification of deterioration factors and the immediate proposal of optimal repair methods simply by providing deterioration images and location information of the target structure. We plan to utilize "AI Shindanshi" as a tool for making technical proposals in planning for extending the life of structures of customers and other activities to contribute to improving business efficiency.

\*Al Shindanshi ("Al診断士®") is a registered trademark of SHO-BOND CORPORATION in Japan as of March 2023



Illustration of SHO-BOND New Clear Cloth Method





After construction



Diagram of Al diagnosis

# **Tsukuba Training Center**

# Motivation for Establishment

### Providing Learning Opportunities Based on Practical Training

Recently, a wide variety of structural repair methods, including preventive maintenance, anti-deterioration, seismic reinforcement, and component replacement methods have been developed. Materials have also become diverse, including concrete, steel, resin materials, and new materials such as aramid and carbon fiber. Familiarity with these methods and materials is essential to ensure construction quality. In addition, the Group's abundant proprietary methods and materials are valuable assets, and we consider it an important task to ensure that these technologies are passed on to the next generation. In order for all employees to master these technologies, we decided that a full-scale training center would be necessary because the existing classroom lectures and on-the-job training at construction sites were insufficient. For these reasons, in October 2021 we established the Tsukuba Training Center with an area of approximately 5.000m<sup>2</sup> near the Technical Research Institute

# Concept of the Facilities

The concept of the facilities is to provide classroom lectures on the intention of adopting each construction method and material, points to note in construction, safety, and others, and then to provide practical training during the training period to consolidate the knowledge. With an eye on training not only for our employees but also for employees of domestic and overseas partner companies that have little experience in repair work, we use the same repair objects and materials in the practical training as those at the construction site so that they can experience the feeling of the site. The main facilities are a seminar room, a construction training room, a safety training room (with a real scaffold, mannequins, danger experience equipment, and VR danger experience equipment), and a full-scale training bridge (a two-span simply supported three I-girder bridge).



Full view of Tsukuba Training Center



Training bridge

### **Overview of the Facilities**

- Training building (total floor space of approx. 1,000m<sup>2</sup>)
- Seminar room: A classroom for up to 54 participants • Construction training room: A seminar room where participants can learn how to
- handle repair materials
- Safety training room: A seminar room where participants can experience the significance of safety activities

### Training bridge (10m x 20m)





Practical training in applying organic materials





Practical training in installing bridge fall prevention equipment (at the training bridge)



**给工研修**要

第四型 1800回至

研想様ラウンジ

安全课档室

-

講習室



Practical training in finding rebars location

# Investigation / Diagnosis / Design Maintenance Technology Inc.

## Overview of Maintenance Technology Inc.

Maintenance Technology Inc., established in 2011, is the only company in the Group engaging in construction consulting services. As of July 2022, the company has 23 employees and three sales offices: Tokyo, Nagoya, and Osaka. The breakdown of the company's operations is 75% consulting services and 25% operations within the Group. The consulting services include investigation, diagnosis, analysis, and repair design of bridges, tunnels, and other public structures. The operations within the Group mainly include a shape measurement of structures using 3D scanners, a photographic measurement using digital cameras, and an analysis of SHO-BOND resin products.

### Introduction of Operations

The following are two representative operations of Maintenance Technology Inc.

### Structure Measurement and 3D-CAD Data Preparation Using 3D Scanners

Repair and reinforcement work consists primarily of installing or replacing members on existing structures. For this reason, accurate measurement is often difficult when existing structures have complex shapes or narrow spaces. In response to this problem, Maintenance Technology Inc. has begun using a recently developed high-performance 3D scanner device to measure the dimensional relationships of existing structures accurately. safely, and quickly. We also convert the point cloud data obtained from 3D scanners into 3D-CAD data to check the degree of interference between members and the scope of construction

### 2 Photographic Measurement Using Digital Cameras

As the scale of construction projects increases, it is difficult to ensure measurement accuracy using the conventional method of manually measuring the drilling position of concrete. Accordingly, we calculate 2D and 3D coordinate positions using photographic measurement technology with a digital camera to accurately determine the coordinate positions to be found, such as the drilling position of concrete. Based on the measurement results, members are manufactured in factories



Photographic measurement

The above two measurement operations involve technologies for accurately measuring existing structures, which are very important for repair and reinforcement work. We will stay up-to-date with the latest trends in new technologies, and contribute to improving the construction quality on sites.



Site investigation



Structure measurement using a 3D scanner





# Basic Concept for Sustainability

With its Corporate Philosophy at the core of management, the Group has designated material issues (Materialities) to get close to its vision. Four designated Materialities involve internal activities and how business activities affect society. We believe that all of these activities are sustainability management that contributes to accomplishing the SDGs and achieving our Corporate Philosophy. We have established a Sustainability Policy and ESG-related policies to provide guidelines for constant activities in accordance with materiality priorities. In August 2022, we set KPIs for each of the priorities to measure their progress and disclosed targets and results.

We will enhance our corporate value over the medium to long term and contribute to creating a sustainable society by continuing to upgrade sustainability initiatives with the input of our internal and external stakeholders. Specifically, we will improve our promotion framework, consider measures, and regularly review them to upgrade the initiatives.

### Sustainability Philosophy



# Strengthening Our Sustainability Promotion Framework

The Group has established a Sustainability Committee, chaired by President and Representative Director and composed of all inside and outside directors. The Committee meets once a year as a general rule to discuss and decide on sustainability issues including social and environmental issues. The Committee also submits and reports the results of discussion on important matters to the Executive Committee and the Board of Directors. The Committee mainly discusses general important matters related to sustainability such as the development of policies and measures related to sustainability, the identification, assessment, and management of climate-related risks and opportunities, and the management of KPIs for non-financial information. We have also established an ESG Promotion Office as an office to integrate activities related to sustainability. The ESG Promotion Office holds meetings as necessary with those charged with ESG in respective departments and at Group companies to work together at the practical level across the Group. Under

such a structure, we are committed to staying and becoming more sustainable by organically cooperating among the management team, the ESG Promotion Office, respective departments, and Group companies.

# KPIs Related to Sustainability

| Materiality  | KPIs  | FY2022  |   |
|--|---|---|---|
| Contribution to<br>the development of<br>sustainable cities  | Number of violations of environmental laws and regulations  | 0   | 0   |
|  | <ul> <li>Rate of reduction in CO<sub>2</sub> emissions intensity<sup>*1</sup><br/>(Scope1 and 2)<sup>*2</sup><br/>(vs. FY2022 [6.5 t-CO<sub>2</sub> / 100 million yen])</li> </ul>            | -25%<br>[4.9 t-CO <sub>2</sub> / 100 million yen] | ±0%<br>[6.5 t-CO <sub>2</sub> /100 million yen] |
| Comprehensive<br>maintenance system  | <ul> <li>Average scores for contractor performance<br/>evaluation in construction industry</li> </ul>   | MLIT:78 or higher<br>NEXCO:80 or higher           | MLIT:80.0<br>NEXCO:86.0                         |
| backed by<br>the organizational<br>capabilities  | <ul> <li>Percentage of construction sites where</li> <li>"8 days off in 4 weeks" is achieved*<sup>3</sup></li> <li>(according to the Japan Federation of Construction Contractors)</li> </ul> | 100%  | 85.9%   |
|  | <ul> <li>Number of fatal accidents</li> </ul>   | 0   | 0   |
|  | <ul> <li>Lost Time Injury (LTI) frequency rate</li> </ul>   | 0.7 or lower                                      | 0.67  |
| Productivity improvement<br>through<br>technology development  | Achievement rate of annual overtime limit of 720 hours*4  | 100%  | 100%  |
| 8 Experie water<br><b>8</b> Experie water<br><b>9</b> Experies<br><b>9</b> Experies<br><b>9</b> Experies<br><b>1</b> | Percentage of female employees in regular recruiting  | 15% or more                                       | 9.5%  |
|  | Percentage of employees with disabilities   | 2.4% or more                                      | 3.3%  |
|  | Rate of response to safety confirmation   | 100%  | 100%  |
| Sound governance and<br>measures for<br>more improvements  | Compliance training participation rate  | 100%  | 98.8%   |
| 16 rect.tata<br>Archinar<br>Martinar   | Number of serious violations of laws and regulations  | 0   | 0   |
|  | Information security training participation rate  | 100%  | 90.3%   |

\*1 CO<sub>2</sub> emissions per consolidated net sales (100 million yen) When to achieve: \*2 FY2031; \*3 FY2024; \*4 FY2024

# **Efforts for Environment**

### Climate-related Financial Disclosure Based on the TCFD Recommendations

The SHO-BOND Group (the "Group") expressed its support for the TCFD recommendations and joined the TCFD Consortium in July 2022. Based on its corporate philosophy of "Inheriting and passing on social infrastructure to the next generation in good condition," the Group is committed to "contribution to the development of sustainable cities" as one of its Materialities and is aware that combatting climate change is an important management challenge.



Based on the recognition that a longer service life of infrastructure contributes to reducing greenhouse gas emissions, we will make efforts so that we can contribute to realizing a sustainable society. These efforts include information disclosure and other initiatives related to climate change, in addition to core business activities as an infrastructure maintenance specialist.

### Strategy

The Group conducted a scenario analysis to identify and assess the impact on its overall business management of the risks and opportunities associated with the "transition" to a low-carbon economy and those associated with the "physical" changes brought about by climate change.

As assumptions for the scenario analysis, we selected the 2°C or lower and 4°C scenarios by referring to several existing scenarios published by the International Energy Agency (IEA), the Intergovernmental Panel on Climate Change (IPCC), and other organizations. Businesses subject to the analysis are the domestic construction business and the manufacturing and sales business of repair and reinforcement materials; the time horizon is assumed to be up to the year 2030. For the climate-related risks and opportunities identified, we have sorted out necessary countermeasures as shown in the table below.

By implementing the countermeasures identified in this report, we will contribute to developing sustainable cities and will achieve sustainable growth by enhancing the resilience of our business.

|  | Risk          |  |  |   |
|--|---------------|--|--|---|
| Changes expected   |               | Description  |  | Countermeasures   |
| Changes in reputation<br>among shareholders<br>and investors   | Opportunity   | $\bullet$ Increased ESG investment in the SHO-BOND Group as an infrastructure maintenance specialist due to being highly regarded for its low CO_2 emissions   |  | • Disclose information about CO <sub>2</sub><br>emissions (Scope 1, 2, and 3) and<br>initiatives aimed at reducing CO <sub>2</sub><br>emissions intensity* (Scope 1 and 2)  |
| Introduction of carbon<br>pricing<br>Introduction of more<br>aggressive targets /<br>policies for CO <sub>2</sub><br>emissions reduction by<br>countries around the<br>world | Risks         | <ul> <li>Increased procurement costs for energy and materials</li> <li>Decreased transactions due to our inability to adequately respond to customers' requests for reducing CO<sub>2</sub> emissions</li> <li>Surges in the purchase prices of resin-based materials and steel materials as a result of decreased production of naphtha and iron ore</li> <li>Increased demand for watershed flood control and disaster restoration work, rather than seismic reinforcement work and service life extension work, in the face of growing severity of weather disasters</li> </ul> |  | <ul> <li>Promote green procurement,<br/>including switching to low-carbon<br/>materials</li> <li>Switch to renewable energy and<br/>promote energy conservation<br/>during construction</li> </ul>  |
| Changes in customer<br>behaviors<br>Rises in raw materials<br>costs<br>Acceleration of national<br>resilience measures   | Opportunities | <ul> <li>Increased price competitiveness with the delivery of<br/>low-carbon construction services and products in the<br/>field of repair and reinforcement</li> <li>Due to CO<sub>2</sub> emissions regulations, the number of<br/>life-extending works of buildings and infrastructures<br/>increases while the amount of overall investments in<br/>construction decreases</li> <li>Increased demand for infrastructure maintenance to<br/>counter natural disasters</li> </ul>  |  | <ul> <li>Invest in solar power generation for<br/>own consumption, etc.</li> <li>Develop low-carbon and<br/>decarbonization technologies</li> <li>Develop new technologies that<br/>support the preventive<br/>maintenance of infrastructure</li> </ul> |
| Increase in average<br>temperature   | Risks         | <ul> <li>Decreased productivity in line with increased heat<br/>stroke cases among on-site workers</li> <li>Increased costs for improving working environment and<br/>introducing equipment, etc. to prevent heat stroke</li> <li>Worsening worker shortages due to deteriorating<br/>outdoor working conditions</li> </ul>  |  | <ul> <li>Develop technologies for improving<br/>on-site working environments and<br/>implement heat stroke<br/>countermeasures</li> </ul>   |
| Growing severity of weather disasters  | Risks         | <ul> <li>Increased costs due to process delays at disaster-stricken sites</li> <li>Supply chain disruption</li> <li>Damage to or shutdown of operations at disaster-stricken own factories or contracted manufacturing plants</li> </ul>   |  | <ul> <li>Work together with the entire supply<br/>chain to strengthen BCP measures<br/>in preparation for disasters</li> <li>Manage sanitation related to water<br/>in a sustainable manner</li> </ul>  |

Metrics and Targets

To realize a decarbonized society-the basic principle underlying the Act on Promotion of Global Warming Countermeasures, the Group has set targets of reducing its CO<sub>2</sub> emissions intensity (Scope 1 and 2) 25% from FY2022 levels by FY2031 and ultimately achieving carbon neutrality by FY2051.

#### CO2 Emissions Reduction Targets

| Metrics   | Base year | Base year result                          |
|---|-----------|---|
| CO <sub>2</sub> emissions<br>intensity<br>(Scope 1 and 2) | FY2022    | 6.5<br>t-CO <sub>2</sub> /100 million yen |
| Target year   | Targ      | jets                                      |
| FY2031  | -25       | %   |
| FY2051  | Net 2     | zero                                      |

See our website below for more details. https://www.sho-bondhd.jp/english/csr/tcfd/

# Managing Sanitation Related to Water in a Sustainable Manner

At construction sites of repair and reinforcement projects undertaken by the Group, we use a huge amount of water. We use water mainly for workers to break up existing concrete, spray water as a dust control measure, and wash their hands. However, we are often unable to draw water to construction sites and we need to take special control measures when discharging used water. Drawing and discharging water at construction sites are big issues. Based on this background, we place emphasis on managing sanitation related to water in a sustainable manner.

As one of initiatives to solve the issues, we started using a circulation-type hand wash station at our construction sites. This station is a system that filters the water used by workers to wash their hands. The station enables them to wash their hands with clean water at any time while saving them the time of drawing water. Maintaining sanitation at construction sites helps prevent the spread of infectious diseases and eliminate inconvenience for workers. In addition, we consider donating this circulation-type hand wash station to a nearby designated shelter or a developing country after completing construction work.

Further, we distributed high-performance and handy water purifiers to our employees to help protect them and their families when a disaster struck. This water purifier can help people ensure life-sustaining water at the time of a disaster because it can turn rainwater and muddy water into drinking water without electricity.

Through such initiatives, we will continue to help achieve the SDGs while increasing the health and safety of our employees.

\*CO2 emissions per consolidated net sales (100 million yen)

### CO<sub>2</sub> Emissions (Scope 1, 2, and 3)

| Category                  | Unit  | FY2022  |
|---------------------------|---|---------|
| Scope1                    | ope1 and 2<br>ons intensity t-CO <sub>2</sub> /100<br>million yen | 2,667   |
| Scope2                    |   | 2,571   |
| Total of Scope1 and 2     |   | 5,238   |
| CO2 emissions intensity   |   | 6.5     |
| Scope3                    | + 00-   | 110,008 |
| Total of Scope1, 2, and 3 | 1-002   | 115,246 |

Coverage: Domestic group companies







Circulation-type hand wash stat installed at a site



Handy water purifie



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### Curbing CO<sub>2</sub> Emissions by Repair Work Feature

We have positioned "contribution to the development of sustainable cities" as one of our Materialities, and recognizing that a longer service life of infrastructure contributes to curb CO<sub>2</sub> emissions, we have formulated an action policy for mitigating climate change through our business in a way that leverages our strengths as an infrastructure maintenance specialist. In this feature, we take a look at the restoration of the Showa Ohashi Bridge, which was a project of significance to the Group, to check what effect the restoration work had on CO<sub>2</sub> emissions. We have done this by estimating the CO<sub>2</sub> emissions volumes generated by new materials and waste in a scenario where the earthquake-damaged deck slabs were repaired and a scenario where they were disposed of and replaced.

### **Overview of the Repair and Restoration Work**





As you can see above, the estimates show that the CO<sub>2</sub> volumes (Scope 3) generated by new materials and waste in the disposal and replacement scenario was 9.2 times higher than in the scenario where the five deck slabs were repaired. When considering actual construction, in addition to CO<sub>2</sub> emissions from new materials and waste (Scope 3), you also need to factor in Scope 1 and Scope 2 emissions from sources such as construction machinery, heavy machinery, and various transportation vehicles, and it is estimated that this will make the difference even greater.

We will continue to contribute to mitigating climate change through our main business of repair and reinforcement construction.

Notes About the Estimates . The estimates do not take the bridge beams (steel frame) into consider bars, and 18 tons of wooden formworks. . For the replacement scenario, the volume of waste was estimated as the volume of the replaced deck slabs The estimates do not include the materials' packaging, etc.

Materials and Waste Volumes – Estimate Assumptions

based on construction methods used at the time.

The size of the deck slabs was: a total width of 24.8m, slab width (road and pavement) of 24m, beam length of 27.54m, slab thickness of 18cm, and paving thickness of 5cm (based on documents from the time).

<sup>•</sup> For the replacement scenario, the volume of main new materials was 1,516 tons of concrete, 380 tons of asphalt paving, 97 tons of reinforcing

For the repair scenario, the volume of main new materials was 117 tons of concrete, 35 tons of asphalt paving, 9 tons of reinforcing bars, 2 tons of wooden formworks, and 1 ton of adhesive materials.

<sup>The volume of reinforcing bars, etc., found in the deck slabs have been estimated using specifications from 1964.
In order to make a fair comparison with repair work carried out in 1964, the volume of materials used for new construction has been estimated</sup> 

<sup>•</sup> The CO<sub>2</sub> emission factors used in the estimates are derived from the databases of the Ministry of the Environment and various other sources. Emissions from the processes of recovering and reinstalling the collapsed deck slabs are deemed to be roughly equal for both scenarios and have therefore been omitted from the estimates.

# Efforts to Develop Talent and Improve the Workplace Environment

# Talent Development

Employees are the most valuable asset of the Group. To play a role in the creation of a sustainable society, we must have a workforce with highly advanced skills along with environments that allow these people to fully utilize this knowledge

Experience is a critical component of repair and reinforcement construction activities. For this reason, on-the-job training is a key element of measures to develop employees' skills. Young people are assigned responsible tasks. This process gives these people the ability to solve problems on their own in business activities.

Employees are given the opportunity to acquire know-how and technologies that match each stage of their advancement at the Group. People progress to the next level in a well-planned and effective manner. We develop the skills of everyone at the Group from a long-term perspective.



### Training for New Employees

Training for new employees is designed as a first phase to let them acquire know-how essential for working at the Group and develop them to become the core workforce. This one-year training consists of introductory training provided mainly in the form of classroom lectures and practical training provided at workplaces to which new employees are temporarily assigned.

### [Introductory training]

The main purposes of the 45-day introductory training that new employees immediately enter are to (1) let them become aware of being a member of a company, (2) let them acquire basic knowledge about their jobs, and (3) foster a sense of solidarity among them as an employee of the SHO-BOND Group.

Many of newly hired graduates majored in civil engineering and construction at college or university, but most of them learn the maintenance field for their first time. We design training programs in a way that allows them to acquire fundamental knowledge until they enter the practical training.

### [Practical training]

The practical training accounts for the majority of the one-year training for new employees. This practical training is an important process for new employees to put the knowledge they have acquired during the introductory training into practice under the direction of senior employees.

We believe that the fundamentals of any kind of iob at the Group lie at work sites, no matter what careers new employees will choose in the future. This is why the practical training is basically provided in work sites where new employees learn repair and reinforcement construction activities



Technical training at the Technical Research Institute



New employee learning on-site practices from a senior employee who has entered his sixth year of working at the Group

# Creating Employee-friendly Workplaces

Group companies exercise care to ensure that their people can stay in company for a long time, doing their jobs with confidence and good health. Workplaces are structured to enable people to develop and take full advantage of their skills

We started to maintain proper working hours earlier than most companies. Thanks to this effort, our employees' awareness has improved significantly and their working hours have accordingly become proper around the time when work style reforms have progressed at other companies. Our turnover remains low at present.

We keep a high employee retention rate by continuing to improve workplace environments based on employees' needs about child-rearing, nursing care, transfers to different locations, and other employment matters.

0.0

(%)

20.0

### Maintaining Proper Working Hours

The Proper Working Time Project was started in 2014 with measures that include improvements to the rules of employment and the initiation of no overtime days to prevent excessive working hours and encourage employees to take time off.

In 2017, the Group started using a new system for recording working time. This framework allows efficiently monitoring the number of hours on the job and when individuals go to work on a weekend or holiday.

We continued to take measures to raise awareness of the paid leave system among employees, such as designation of a month where encouraging them to take paid holidays. In FY2022, we achieved the target that all employees take 100 or more days off per year. For the fiscal year ending June 30, 2023, we increased the target number of days off to 110 and are continuing to encourage the use of vacation time.

#### Percentage of Employees Taking 100 or More Days Off per Year



### Diversity and Inclusion

### Promoting Women's Active Engagement and Advancement in Workplaces

The Group aims to increase the percentage of female engineers in regular recruiting to 15% or higher, and seeks to ensure more female engineers. We keep a high female employee retention rate by providing training programs targeted at female engineers and conducting a monthly survey of how their minds have changed, in addition to making their workplace

environments more employee-friendly. We will continue to recruit and develop more female engineers to have a higher retention rate and produce more female managers in the future.





### Supporting Employees in Balancing Work and Child-rearing and/or Nursing Care

We provide employee assistance programs more than required by law and promote the use of them to allow employees to balance work and child-rearing and/or nursing care with confidence. To increase the use by men of time off for child care, a new system for encouraging the use of such programs started in 2019. A Child Care Leave Promotion Pamphlet has been prepared to raise the awareness and use of the programs. This has contributed to an increase in the use of child care leave by male employees. In FY2022, all male employees who were entitled to take child care leave actually took it.

In 2020, SHO-BOND CORPORATION received Kurumin certification as a company that supports child care.

|  | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 |
|--|--------|--------|--------|--------|--------|
| Percentage<br>of men who<br>took child<br>care leave | 0.0%   | 45.8%  | 80.0%  | 65.0%  | 100.0% |



### Selection of Employment Type and the Self-declaration System

The Group gives employees the flexibility to choose an employment type with or without transfers to different locations. Many individuals change this employment type to reflect the current stage of their lives. Every year, there are employees who ask to be shifted to or from status that allows transfers. The self-declaration system allows individuals to confirm their employment type and job status once every year.

|   | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 |
|---|--------|--------|--------|--------|--------|
| Changes in the<br>number of female<br>engineers | 14     | 16     | 18     | 23     | 26     |

# **Efforts for Health and Safety**

Based on the philosophy that our highest priorities are the protection of life and the safety of construction activities, not only will the SHO-BOND Group comply with laws and regulations related to occupational health and safety but all of its officers and employees will also work to eliminate workplace accidents as well as make efforts to maintain and promote good health. What is more, we will further aim to create comfortable working environments.

# Initiatives for Creating SHO-BOND Culture of Safety

### **Project Overview**

We believe that safe and secure workplace environments without an accident will be created by upgrading the Group's safety culture from the dependent model that workers do what they are told to the independent and mutually enlightening model that workers can proactively do their jobs without being told and mutually pay attention. Based on this belief, we promote initiatives for creating SHO-BOND culture of safety to realize a higher-level safety culture that aligns with our Health and Safety Policy.

- Health and Safety Policy
- 1. We will achieve a safety culture that is of an even higher level
- 2. We will establish a health and safety management system.
- 3. We will ensure the steady implementation of risk assessments. 4. We will carry out measures for the reduction of occupational accidents
- involving third parties and severe workplace accidents. 5. We will execute thoroughgoing health and safety education toward our
- own employees and the staff of our partner companies. 6. We will ensure thorough preventive measures for occupational diseases 7. We will promote work style reforms for the prevention of health disorders
- caused by overwork. 8. We will thoroughly ensure the prevention of property damage accidents.



# 家族の笑顔思い出

### Awarding Workers for their Outstanding Health and Safety Commitment

We award workers who have earnestly participated in health and safety activities on construction sites to raise safety awareness among employees.



Awarding a worker for his outstanding health and safety commitment at construction sites

### Safety Training

We provide on-site workers and other construction personnel with hands-on safety training on site to help them deepen their understanding of health and safety activities and naturally have safe behavior, mindset, and values.



On-site safety training

### Digital Transformation (DX) in Health and Safety Activities

The Group drives the DX in health and safety activities to improve their effectiveness and reduce on-site workers' workloads. To this end, we formed a DX Promotion Working Team for safety. While identifying areas for improvement in the current health and safety activities, we are working to promote the DX by setting targets.

We installed 93 wearable video cameras in the Group's construction sites nationwide to enable workers to watch live streams and monitor the progress of projects from a regional office, branch, or on-site office. Such a system also enables an on-site worker and a client to connect on a livestreaming platform and enables the client to be present remotely.

### Health and Safety Patrols

President, General Managers of Regional Offices and Branches, and other senior members occasionally go out on health and safety patrols to eliminate workplace accidents and improve the health and safety levels. They conducted a total of 3,950 patrols nationwide in FY2022



Health and safety patrol by President

## Health and Safety Classes

The Group provides safety training programs to employees of the Construction Department, Marketing and Sales Department, and Engineering Department in July every year. In FY2022, the programs were provided in seven installments, all of which were online due in part to the COVID-19 pandemic. Contents of the programs included the overviews of workplace accidents and property damage accidents occurred in FY2022 and priority actions to take in FY2023. We also provided special education and health and safety classes by in-house lecturers to our engineers and a total of 444 employees from 81 partner companies in FY2022

At the Tsukuba Training Center completed in October 2021, we started providing education through which employees can acquire knowledge about health and safety and experience safety hazards using VR headsets. Going forward, we will expand the scope of trainees to include employees of partner companies and other personnel, and provide practical health and safety classes to improve each trainee's risk perception and foster their awareness of health and safety, including values, decision criteria, and beliefs.



VR hands-on experience of safety hazards (VR video on the left [for illustrative purposes] and employees wearing VR headsets on the right)



Remote monitoring of construction sites using wearable video cameras



Health and safety patrol by General Manager of Branch

# **Corporate Governance**

# Basic Views

The SHO-BOND Group positions corporate governance as one of the highest management priorities to realize our corporate philosophy "With a sense of mission of 'Inheriting and passing on social infrastructure to the next generation in good condition,' we will contribute to the realization of a safe and affluent society by utilizing our advanced technological development capability as a leading company in the structure maintenance business.

By fulfilling our social responsibility as a company that specializes in the maintenance business, we will work together with our shareholders and all other stakeholders to achieve sustainable growth and enhance our corporate value over the medium to long-term. In addition, we will aim for a highly sound and transparent management by developing and promoting a corporate governance system that enables swift and decisive decision-making.

# Progress in Strengthening Corporate Governance

We transitioned to the holding company system ahead of our industry peers and later became a company with an Audit and Supervisory Committee to strengthen corporate governance. We will continue maintaining a proper governance system while keeping a close eye on social circumstances.

| Date           | Event  |
|----------------|--|
| January 2008   | Transitioned to the holding company system   |
| September 2015 | Transitioned to a company with an Audit and Supervisory<br>Committee and shortened directors' term of office to one year |
| September 2017 | Increased the number of Outside Directors to three   |
| July 2018      | Started evaluating the effectiveness of the Board of Directors   |
| November 2018  | Established the Nomination and Remuneration Advisory Committee   |
| August 2022    | Established the Sustainability Committee   |

# **Overview of Corporate Governance System**

### Board of Directors

The Board of Directors has eight members including four directors who are members of the Audit and Supervisory Committee. The directors discuss and reach decisions about important matters involving management as prescribed by laws and regulations and the rules for the Board of Directors. As a rule, the board meets once every month and meets at other times as needed in order to reach decisions quickly. (Number of meetings in FY2022: 13 times)

### Audit and Supervisory Committee

SHO-BOND is a company with Audit and Supervisory Committee. The Audit and Supervisory Committee has four members, of whom three are Outside Directors. As a rule, the committee meets once every month and meets at other times as needed. The Audit and Supervisory Committee, as an independent body, audits and supervises the performance of directors who are not members of the Audit and Supervisory Committee. The committee also prepares audit reports and reaches decisions about matters prescribed based on laws and regulations, the Articles of Incorporation, and Audit and Supervisory Committee rules and audit standards. The Audit and Supervisory Committee works with the accounting auditor and the Audit Office to perform audits efficiently. (Number of meetings in FY2022: 11 times)

### Nomination and Remuneration Advisory Committee

The Nomination and Remuneration Advisory Committee has four members; three Outside Directors and the President and Representative Director. This committee is actively involved in formation and execution of the succession plan for the President, has adequate discussions about matters on directors' nomination and remuneration and gives opinions and advice to the Board of Directors (Number of meetings in FY2022: 3 times)

### Executive Committee

The President and Representative Director presides over the Executive Committee as a body to assist his decision-making in management. This committee consists of directors who are not members of the Audit and Supervisory Committee and senior executives, including the executives of SHO-BOND subsidiaries, nominated by the President. As a rule, the committee meets twice every month and meets at other times as needed in order to reach decisions quickly. (Number of meetings in FY2022: 22 times)

### Internal Committees

Major committees related to business execution include the Risk Management Committee, Sustainability Committee, Internal Control Committee and the Asset Management Committee. Important management issues are continuously discussed by theme at these committees, and submitted and reported to the Executive Committee as needed.

#### Overview of Corporate Governance System



# Method of Evaluating Effectiveness of the Board of Directors

To evaluate the effectiveness of the Board of Directors, a third-party external adviser is used in order to ensure objectivity every other year. The evaluation is performed by asking all directors, including members of the Audit and Supervisory Committee, to complete self-evaluation questionnaires. The Board of Directors reviews the one-year efforts to address the recognized issues, and conducts self-analysis and evaluation in the year after the evaluation by questionnaire.

### Summary of Evaluation Results

For the fiscal year ended June 2022, a third-party external adviser is used to conduct a survey of all directors, including members of the Audit and Supervisory Committee. As a result, the evaluation based on the analysis of the responses confirmed the effectiveness of the Board of Directors. One of the issues that needed to be addressed in FY2022 was offering better executive training. To address this issue, we held three directors' study sessions to improve their knowledge and abilities as directors. We will continue to improve the effectiveness of the Board of Directors by further deepening discussions on sustainability management and continually enhancing executive training.

# SHO-BOND's Outside Directors

The Company elects three Outside Directors who are Audit and Supervisory Committee members. Mr. Satoru Miura has knowledge and experience as a certified public accountant as well as considerable experience as a corporate accounting advisor. Mr. Akira Hongo has knowledge and experience as an attorney as well as considerable experience as a corporate consulting attorney. Ms. Reiko Kuwano has considerable academic expertise and experience in the field of civil engineering as a professor at the University of Tokyo. These persons play a role in ensuring the properness of the business execution of the Company by drawing on their respective knowledge and experience and providing oversight and advice from an independent standpoint as an Outside Director. None of the three Outside Directors have personal, capital or business relationships or any other special interests with the Company. In addition, the standards for Independent Outside Directors in the Company's Corporate Governance Guidelines comply with the independence standards of financial instruments exchanges. We seek to provide the Outside Directors with information in an efficient and in-depth manner so that they can fully understand the Group and exercise their abilities to the fullest in management. When the Outside Directors make inquiries, relevant executive officers directly give explanations to them as necessary, promoting smooth communication with them.

# Dialogue with Shareholders and Investors

The Group places importance on information disclosure and dialogue with shareholders, institutional investors, analysts, and other interested parties. For institutional investors, we hold an information meeting about financial results twice a year as well as one-to-one meetings held every quarter. In addition to such one-to-one meetings more than 100 times a year, we hold a small meeting attended by President after announcing the full-year financial results. For individual shareholders, we hold information meetings in Tokyo and Osaka in March every year after transitioning to the holding company system in 2008. Dialogues are consistent with the spirit of fair disclosure, and care is exercised to prevent the disclosure of insider information. The Executive Committee and the Board of Directors regularly receive feedback periodically concerning the opinions and concerns of shareholders. This information helps management take actions aimed at achieving sustained growth.

The basic policy for investor relations is to provide accurate, fair and timely information about our management strategies, business activities, financial condition, and other items. The purpose is to build long-term relationships rooted in trust and receive a proper evaluation from all stakeholders. This policy is posted on our website.

| Activity |  | Frequency (FY2022)   |  |
|----------|--|--|--|
|          | Information meetings for<br>individual shareholders*   | We refrained from holding<br>the meetings due to<br>the COVID-19 pandemic. |  |
|          | Information meeting for<br>institutional investors<br>(attended by President<br>and Chief Financial Officer) | 2 times  |  |
|          | One-to-one meetings by<br>Chief Financial Officer  | 102 times  |  |

\*The meetings are held in Tokyo and Osaka in March every year

# **Corporate Governance**

# Details of Compensation for Directors (and Other Officers)

At Board of Directors meeting held on September 26, 2019, the SHO-BOND Group resolved the policy regarding decisions on the details of the compensation, etc. for each individual Director (excluding Directors serving as Audit and Supervisory Committee Members; hereinafter "Directors"), and the details of such are as follows:

As the Company is a holding company that is in charge of supervising Group companies, the compensation for the Company's Directors comprises basic compensation only. Furthermore, the payment of basic compensation shall be monthly fixed compensation in cash.

All of the Company's Directors, other than Outside Directors, concurrently serves as Director or Auditor of a subsidiary. Compensation is determined by proportionately taking into consideration the weight of the business of both the Company and subsidiaries, and multiplying it by the monthly compensation amount of subsidiaries. Furthermore, bonuses, which are paid depending on financial results, are paid by the subsidiaries to which the Directors belong. In determining compensation, etc., the President and Representative Director prepares a compensation proposal, including the portion to be paid by subsidiaries, that is determined at a Board of Directors meeting after consulting the Nomination and Remuneration Advisory Committee, which comprises the Company's Outside Directors and the President and Representative Director.

In determining the details of individual compensation, etc. for Directors pertaining to the fiscal year ended June 30, 2022, the Company judged that it is in line with this policy as the Nomination and Remuneration Advisory Committee carried out a multifaceted investigation of the original proposal, and the Board of Directors made the determination after taking into consideration the report from the Nomination and Remuneration Advisory Committee.

The upper limit on compensation to Directors is ¥350 million per year (not including employee salaries), and the upper limit on compensation to Directors serving as Audit and Supervisory Committee Members is ¥50 million per year, both of which were resolved at the 8th Annual General Meeting of Shareholders held on September 25, 2015.

Total Amount of Compensation, etc. for the Fiscal Year Ended June 30, 2022 (Million Yen Unless Otherwise Stated)

| Category   | Number of Directors (persons) | Amount      | Total amount of remuneration by type:<br>Basic remuneration |
|--|-------------------------------|-------------|---|
| Directors (excluding Directors serving as Audit<br>and Supervisory Committee Members)<br>[of which, Outside Directors] | 5<br>[-]                      | 83<br>[-]   | 83<br>[-]   |
| Directors (Audit and Supervisory<br>Committee Members)<br>[of which, Outside Directors]                                | 4<br>[3]                      | 24<br>[19]  | 24<br>[19]  |
| Total  | 9<br>[3]                      | 107<br>[19] | 107<br>[19]   |

Note: The above number of directors includes one director serving as Audit and Supervisory Committee member who retired at the closing of the 14th Annual General Meeting of Shareholders held on September 28, 2021

# Cross-shareholdings

As a rule, the Group does not purchase or hold the stock of suppliers and other business partners with the exception of cases where purchasing and holding stock helps conduct business operations efficiently and maintain and strengthen business relationships, thereby contributing to the medium- to long-term growth of its corporate value.

Holdings of the stock of other companies are examined individually by taking into consideration of qualitative and quantitative benefits and risk factors, including holding purposes, the amount of transactions with these companies, their operating environment, results of operations and financial position, dividend yields as a return of investments and stock price fluctuation risks. Holdings are reduced when there is little need to continue owning the stock in accordance with the current Medium-term Business Plan.

Voting decisions concerning the stock of other companies are based on the goals of increasing shareholder value and contributing to the long-term growth of the corporate value of them

# Internal Control

The SHO-BOND Group has a system of internal controls for ensuring that all business operations are conducted properly in accordance with the Companies Act and Ordinance for Enforcement of the Companies Act. In addition, the Board of Directors has established The Basic Policy for Constructing an Internal Control System that has the goals of efficient business activities, reliable reports, strict compliance with laws and regulations, and other items.

We are taking various measures, including the establishment of an Internal Control Committee and a department in charge of promoting internal control in FY2019, in order to further strengthen internal control within the Group and permanently ensure a favorable control environment.

### Directors

April 2001 April 2011

April 2013

April 2015 April 2017

May 1989 July 2012

July 2016

April 2017



President and Representative Director Tatsuya Kishimoto

Joined SHO-BOND CORPORATION Joined SHO-BOND CORPORATION Director and Executive Orifoer, and General Manager of Kinki Regional Office Senior Wanaging Director and General Wanager of Director and the Company Senior Managing Director and General Manager of Marketing and Sales Division of SHO-BOND CORPORATION Executive Vice President and Director President and Representative Director Director and General Manager of Corporate Planning Deartment of the Company President of General Incorporated Foundation Ueda Memorial Foundation (current position) 7 President and Representative Director of the Company (current position)

May 2017 September 2017 Company (current position) President and Representative Director, and General Manager of Marketing and Sales Division of SHO-BOND CORPORATION (current position) July 2021



Director and General Manager of Sales Management Department Shigeru Naraoka

Joined SHO-BOND CORPORATION Voned SHO-BOND CONFORMION Director and Executive Officer, and General Manager of Chubu Regional Office Director and General Manager of Sales Management Department of SHO-BOND WATERIAL CO., LTD. Director and General Manager of Marketing and Sales Department, Marketing and Sales Division of SHO-BOND CORPORATION

 SHO-BOND CORPORATION
 President and Representative Director of
 SHO-BOND MATEPIAL CO., LTD. (current position)
 April 2019
 Director and General Manager of Sales
 Management Department, Marketing and Sales
 Division of SHO-BOND CORPORATION
 September 2019
 Director and General Manager of Sales Management Department of the Company (current position)

Littlebut at a device magnet
http://www.analystation.com/analystation/
April 2019
Serior Maraging Director, General Marager of Corporate Administration
Director and General Marager of Administration and Human Resources
Department of SHO-BOND CORPORATION
Director and General Marager of General Atlass
Department of series Marager of General Atlass
Department of the Company (current position)
Machinehor of the Company (current position)

i 1988 i 1995

April 1979 January 201

April 2011

July 2012

September 201

April 2014

April 2017

April 2019

July 2012

April 2014



# Outside Director Supervisory Committee Member

Satoru Miura

Registered as certified public accountant (to present) Established Miura C.P.A. Office (to present) Outside Corporate Auditor of NODA April 1981 June 1990 February 2015 Established invitional Cit are control to presently Outside Corporate Auditor of NODA CORPORATION (current position) Corporate Auditor of Toukei Computer Co., Ltd. Outside Director (Audit and Supervisory Committe Members)

September 2017 Outside Director (Audit and Supervisory Committee

Member) of the Company (current position) September 2021 Auditor of SHO-BOND CORPORATION

#### Knowledge, Experience, Skills, etc. of Each Director (Skill Matrix)

| No. | Name                  | Inside<br>Outside | Corporate management | Finance /<br>Accounting | HR | Legal affairs /<br>Compliance /<br>Risk management | Global | Т |
|-----|-----------------------|-------------------|----------------------|-------------------------|----|--|--------|---|
| 1   | Tatsuya<br>Kishimoto  | Inside            | •                    |                         | •  | •  |        |   |
| 2   | Koyo<br>Takeo         | Inside            | •                    |                         | •  | •  |        |   |
| 3   | Yasuhiro<br>Sekiguchi | Inside            | •                    | •                       |    | •  | •      |   |
| 4   | Shigeru<br>Naraoka    | Inside            | •                    |                         |    |  | •      |   |
| 5   | Shunya<br>Tojo        | Inside            | •                    |                         | •  | •  |        |   |
| 6   | Satoru<br>Miura       | Outside           | •                    | •                       |    | •  |        |   |
| 7   | Akira<br>Hongo        | Outside           |                      |                         | •  | •  |        |   |
| 8   | Reiko<br>Kuwano       | Outside           |                      |                         |    |  | •      |   |

Note: The table is not indicative of all the expertise and experience possessed by the Directors



Details

corporate management, making of significant corporate decisions, etc.

Contributes to management based on experience taking part in

related to finance and accounting

Director and General Manager of Technology Promotion Department

### Koyo Takeo

Joined SHO-BOND CORPORATION Director and Executive Officer, and G tive Officer, and General J Director and Executive Officier, and General Manager of Kuyshu Regional Office Director and Executive Officier, and General Manager of Engineering Department at Head Office, Marketing and Sales Division Director and Managing Executive Officer, and Get Sale Manager Of Division of Get Sale Control Control Officient Director and General Manager of Technology Pomotion Department of the Company (current position) Senior Manager of General Manager of

Senior Managing Director and General Manager of Engineering Division of SHO-BOND CORPORATION Senior Managing Director, General Manager of Engineering Division, and Director of Technical December Networks

ngineering Division, and Director of the lesearch Institute Securitive Vice President and Representative Director, and General Manager of Technical Research Institute (current position)

Director and Full-time Audit and Supervisory Committee Member

### Shunya Tojo

November 1990 Joined SHO-BOND CORPORATION

Joined SHO-BOND COHPORTION Director and General Manager of Administration and Human Resources Department of SHO-BOND CORPORATION Managing Director, General Manager of Corporate Planning Division, and General Manager of Administration and Human Resources Department Administration and Human Hesources Department, September 2015 Director, General Manager of General Affairs Department, and General Manager of Compliance Department Wanaging Director, General Wanager of Comporta Administration Division, and General Wanager of Administration and Human Besources Department of SN-0-00NI COPPORATION Director and General Manager of Public Relations Department of the Compone

Outside Director

Audit and Supervisory Committee Member

### Akira Hongo

Registered as attorney at law (to present) Established Hongo sogo Law Office (to pre Professor of Keio University Law School (current Outside Director (Audit and Supervisory Cor Member) of the Company (current position)

Skill items

Corporate

Finance /

HR

Accounting

Legal affairs / Compliance /

Risk managem

Technology /

Global

R&D

management



# April 1989 May 2014

July 2017 December 201 September 2018

April 2020 mber 202 Director and General Manager of Corporate Planning Department

### Yasuhiro Sekiguchi

Joined The Mitsubishi Bank, Ltd. (currently MUFG Bank, Ltd.) General Manager of Strategic Investment Division Joined SHO-BOND CORPORATION Director, Deputy General Manager of Corporate Administration Division and General Manager of Corporate

Administration Division and General Manager of Corporat Planning Department of SH-O-BOND CORPORATION 8 Director and General Manager of Corporate Planning Department (current position) Managing Director, Deputy General Manager of Corporate Administration Division and General Manager of Corporate Planning Department of SHO-BOND CORPORATION 9 Managing Director, General Manager of Corporate Planning Charantment and Corporate Administration Division, General Manager of Corporate Planning Charantment and Corporate Managing Of Corporate Planning Charantment of SHO-BOND CORPORATION 9 Managing Director, General Manager of Corporate Planning Charantment and Corporate Administration Division, General Manager of Corporate Managing Corporate Planning Charantment and Corporate Manager of Corporate Planning Charantment and Corporate Manager of Corporate Planning Charantment of SHO-BOND CORPORATION 9 Manager of Corporate Planning Charantment of SHO-BOND CORPORATION 9 Manager of Corporate Planning Charantment of SHO-BOND CORPORATION 9 Manager of Corporate Planning Charantment of SHO-BOND CORPORATION 9 Manager of Corporate Planning Charantment of SHO-BOND CORPORATION 9 Manager of Corporate Planning Charantment of SHO-BOND CORPORATION 9 Manager of Corporate Planning Charantment of SHO-BOND CORPORATION 9 Manager of Corporate Planning Charantment of SHO-BOND CORPORATION 9 Manager of Corporate Planning Charantment of SHO-BOND CORPORATION 9 Manager of Corporate Planning Charantment of SHO-BOND CORPORATION 9 Manager of Corporate Planning Charantment of SHO-BOND CORPORATION 9 Manager of Corporate Planning Charantment of SHO-BOND CORPORATION 9 Manager of Corporate Planning Charantment of SHO-BOND CORPORATION 9 Manager of Corporate Planning Charantment of SHO-BOND CORPORATION 9 Manager of Corporate Planning Charantment of SHO-BOND CORPORATION Planning Planning Charantment of SHO-BOND CORPORATION Planning

Authinistration Division, General Manager of Corporate Planning Department, and General Manager of ESG Promotion Office, Corporate Planning Department (current position)



Outside Director Audit and Supervisory Committee Member Reiko Kuwano

rsity of Tokyc

Joined TAISEI CORPORATION Research Associate of the Univ April 1989 March 1999 ch 1999 Besaarch Associate of the University of Tokyo boer 2001 Senior Researcher of Public Works Research Institute 2006 Associate Professor, Institute of Industrial Science of the University of Tokyo 2013 Professor (current position) anter 2017 Outside Director (Audit and Supervisory Committee Member) of the Company (current position) April 2006 July 2013



# **Risk Management**

# Risk Management Framework

The Group has risk management rules and a Risk Management Committee to be prepared for events that can have a major impact on business activities and reduce exposure to these risk factors. Risk management also includes measures to minimize damage and losses if a crisis occurs and to prevent incidents from happening again.

The Risk Management Committee plays a central role in risk management at the Group. The Committee chaired by President and Representative Director meets once a quarter as a general rule. The Committee puts together individual risks discussed in other internal committees to (1) identify risks and implement preventive measures, (2) act as an emergency response headquarters when a crisis may occur, and (3) develop actions to prevent incidents from happening again across the Group. The Committee periodically evaluates risk factors according to the established process, and constantly reexamines the risk management process itself to reflect current changes in the social and business environment.

#### Risk Management Framework Chart Risk Management Process Process Explanation Board of Directors Business risk factors of the SHO-BOND Group are divided into Risk Categories and **Executive Committee** specific potential problems are identified for each risk factor. 0 Magnitude of risk is defined as "the impact of an incident" multiplied by "the probability of the incident happening." Risk Management Committee Studies to determine numerical and other indicators for individual risk factors and the methods for monitoring them. Monitoring for changes in "the impact of an incident" and "the probability of the incident happening." 2 Risk analysis Estimates of changes in risk exposure by using a qualitative analysis of changes in regulations, amendments to laws, government financial policies and other items that are difficult to measure numerically. Prepare lists of business tasks that every business unit performs periodically in order to measure and monitor risk factors. Next, check to confirm that risk factors are 3 Risk control being controlled by these business tasks. By using the reports from business units, the executive in charge of risk management assesses the magnitude of every risk factor and submits a report to the Risk Management Committee The Risk Management Committee determines priorities concerning the magnitude and 4 categories of risk factors and discusses methods for the efficient management of risk. Emergency response manuals to be prepared for incidents. Perform studies concerning crisis management activities, such as direct responses to 6 incidents, crisis management meetings, reports to government offices and agencies, public announcements about emergencies, and other responses to incidents. Responses to incidents Group Companies

# Information Security Measures

With the acceleration of DX and changes in the usage environment of information systems, information security risk has been increasing these days, such as the growing sophistication of external cyberattacks. In the construction industry in particular, ensuring information security is an urgent issue as construction site offices are exposed to major information security risks. We therefore raise awareness of these risks among employees by taking such measures as having all employees including the executive officers complete e-learning courses, conducting a phishing drill, and distributing awareness posters to our construction sites across Japan. Going forward, we will prevent unauthorized access from outside the Group and computer viruses by sequentially taking more defensive and detective network security measures.

# **Business Continuity Plan**

The Group has a business continuity plan (BCP) to address disaster risk such as a great earthquake. We strive to improve our capability to continue business operations based on the BCP on a regular basis to avoid the disruption of key operations as much as possible in the event of a major disaster and to return to normal operations early if disrupted.

We periodically conduct an evacuation drill and first aid training on the assumption that a great earthquake has occurred. We also conduct a drill of responding to a safety confirmation email and have each site regularly check the items of an emergency kit. We will continue to upgrade the BCP and expand the scope of areas covered by it to reduce disaster risk.

# Compliance

# Basic Concept for Compliance

The SHO-BOND Group believes that a sound compliance framework is vital to conducting business activities that meet high standards of social responsibility and are capable of sustainable growth. The SHO-BOND Group Code of Conduct enables all employees to do their jobs based on a thorough understanding of socially acceptable behavior, laws and regulations, internal rules and other guidelines.

All employees at the group are dedicated to the achievement of the action principles "Corporate Credo" and the Corporate Philosophy by using a broad range of activities for earning the trust of society and all stakeholders.

# **Compliance Promotion Framework**

The Group implements a compliance program. The SHO-BOND Group Code of Conduct clearly states the rules of behavior that its employees are expected to follow. We also have a compliance manual to ensure that all employees are aware of the importance of compliance.

In addition, we have close cooperation among Group companies by establishing a Compliance Office responsible for compliance matters and assigning a compliance leader to each site.

 $\bar{\mathsf{F}}\mathsf{urther},$  we provide education and training to all employees of the Group to raise compliance awareness.

# Compliance Training

The Group provides compliance education as part of training for new employees and follow-up training\* provided each year. In the training, we give a general compliance lecture and urge employees to observe the SHO-BOND Group Code of Conduct. We also ensure that employees are aware of the Construction Business Act that must be observed as a construction company.

We seek to create an employee-friendly work environment by periodically having all employees do a self-check and providing them with e-learning to prevent all forms of harassment. \*Follow-up training is targeted at employees for their second year and those who have just got promoted.

# Whistleblowing Contact Points

The Group has internal and external contact points for whistleblowers to report any kind of violation they detect, regardless of its agent (individual or organization) and the type of regulations violated (applicable laws, the rules of employment, the SHO-BOND Group Code of Conduct, etc.). The purpose is to investigate and eradicate such violations as soon as we can. We pay due care so that whistleblowers will remain anonymous as a general rule and will not suffer any disadvantages.

# Establishment of Anti-bribery Policy

The Group has sought to maintain sound business practices. In August 2022, we established an Anti-bribery Policy to clarify our anti-corruption philosophy from a sustainability perspective. Based on the SHO-BOND Group Code of Conduct, we will continue to uphold high ethical standards to prevent bribery, and continue to ensure fair and sound relationships with our customers and all other stakeholders.

St

# The SHO-BOND Group Code of Conduct

#### Social mission

1. Earn customer satisfaction and trust

We will fulfill all of our contractual obligations with customers and, based on sound communications with customers, provide the best possible construction services and products by making proper and timely decisions.

2. Provide outstanding technologies and quality We will constantly develop new technologies and aim for even higher quality.

Take responsibility for your actions

3. Perform sales activities properly

We refuse to engage in collusion, bribes, dumping and other improper activities for receiving orders and will never accept any invitation to participate in these types of activities. We will work closely with project owners and prime contractors in order to receive orders in a fair manner and to clearly define contract terms.

4. Remain focused on suitable construction operations and safety At all projects, we will establish a framework for compliance with the Construction Business Act and other construction laws and regulations, preventing accidents, and facilitating mutual understanding and cooperation with partner companies and suppliers.

 Ensure that accounting procedures and disclosure activities are proper We will establish and adhere to fair and appropriate procedures for accounting activities to ensure the reliability of financial reports and

accounting activities to ensure the reliability of financial reports and disclose information required by our stakeholders. 6. Eliminate antisocial forces

We refuse to respond to improper requests from antisocial forces and will never have any relationship with antisocial forces.

7. Maintain a sound crisis management framework

We have an organizational crisis management framework in order to respond immediately to a natural disaster, cyberattack, terrorism or other crisis.

#### Unify the workplace

 Contribute to maintaining a pleasant and productive workplace environment We will maintain healthy and safe workplace environments through measures to improve employment terms and other working conditions.
 Show respect for human rights

We will never allow discrimination or other improper treatment of our employees regarding employment and compensation based on their nationality, gender, beliefs or other personal characteristics.

10. Play a role in placing the right people in the right jobs We will perform fair and appropriate performance evaluations and provide compensation and training with the goal of enabling our employees to fully utilize their capabilities.

#### Contribute to society

11. Participate in community involvement

We will increase opportunities for communications with communities in order to participate in many programs for contributing to society. 12. Be part of environmental conservation activities

We will reduce the environmental impact of our construction projects through many activities in order to combat global warming, conserve energy and protect the environment in other ways.

# **11-Year Data**

|  |                 |        |        |          |          |          | 1        |          |          |          |          |          |
|--|-----------------|--------|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|  |                 | FY2012 | FY2013 | FY2014   | FY2015   | FY2016   | FY2017   | FY2018   | FY2019   | FY2020   | FY2021   | FY2022   |
| Orders   | (million yen)   | 51,545 | 47,229 | 55,546   | 54,811   | 53,509   | 60,536   | 67,859   | 74,380   | 84,436   | 74,548   | 96,065   |
| Net Sales  | (million yen)   | 44,368 | 51,792 | 49,599   | 52,124   | 52,334   | 53,250   | 59,682   | 60,824   | 67,590   | 80,065   | 81,193   |
| Gross Profit                                       | (million yen)   | 9,652  | 10,300 | 10,614   | 12,643   | 12,709   | 13,797   | 14,781   | 16,082   | 17,319   | 20,782   | 22,555   |
| Gross Profit Margin                                | (%)             | 21.8   | 19.9   | 21.4     | 24.3     | 24.3     | 25.9     | 24.8     | 26.4     | 25.6     | 26.0     | 27.8     |
| Selling, General and Administrative Expenses       | (million yen)   | 3,120  | 3,443  | 3,078    | 3,499    | 3,406    | 3,637    | 4,000    | 4,354    | 4,389    | 5,050    | 5,288    |
| Operating Profit                                   | (million yen)   | 6,532  | 6,856  | 7,535    | 9,144    | 9,303    | 10,160   | 10,781   | 11,727   | 12,930   | 15,732   | 17,267   |
| Operating Profit Margin                            | (%)             | 14.7   | 13.2   | 15.2     | 17.5     | 17.8     | 19.1     | 18.1     | 19.3     | 19.1     | 19.6     | 21.3     |
| Ordinary Profit                                    | (million yen)   | 6,867  | 7,221  | 7,932    | 9,480    | 9,648    | 10,516   | 11,187   | 12,165   | 13,507   | 16,302   | 17,669   |
| Profit Attributable to Owners of Parent            | (million yen)   | 3,687  | 4,349  | 5,008    | 5,926    | 6,267    | 6,997    | 7,301    | 8,080    | 9,005    | 11,340   | 12,366   |
|  |                 |        |        |          |          |          |          |          |          |          |          |          |
| Total Assets                                       | (million yen)   | 64,364 | 70,259 | 70,708   | 75,784   | 77,327   | 84,266   | 90,976   | 94,595   | 102,667  | 109,807  | 117,423  |
| Net Assets   | (million yen)   | 47,801 | 51,797 | 56,081   | 61,470   | 63,701   | 69,243   | 74,096   | 78,108   | 83,617   | 90,960   | 94,247   |
| Equity Ratio                                       | (%)             | 74.3   | 73.7   | 79.3     | 81.1     | 82.4     | 82.2     | 81.4     | 82.5     | 81.4     | 82.8     | 80.2     |
| ROE  | (%)             | 7.9    | 8.7    | 9.3      | 10.1     | 10.0     | 10.5     | 10.2     | 10.6     | 11.1     | 13.0     | 13.4     |
| ROA  | (%)             | 6.0    | 6.5    | 7.1      | 8.1      | 8.2      | 8.7      | 8.3      | 8.7      | 9.1      | 10.7     | 10.9     |
|  |                 |        |        |          |          |          |          |          |          |          |          |          |
| Net Cash Provided by (Used In) Operating Activitie | S (million yen) | 4,591  | 4,058  | 4,835    | 4,804    | 4,386    | 7,484    | 1,734    | 4,550    | 4,540    | 2,737    | 7,834    |
| Net Cash Provided by (Used In) Investing Activitie | s (million yen) | -706   | -1,511 | -4,807   | -690     | -2,365   | -3,793   | -2,063   | -5,572   | 16,778   | -2,638   | 5,315    |
| Net Cash Provided by (Used In) Financing Activitie | S (million yen) | -1,208 | -1,370 | -1,503   | -1,801   | -2,152   | -2,606   | -3,147   | -3,312   | -4,179   | -4,485   | -9,177   |
| Cash and Cash Equivalents at End of Period         | (million yen)   | 15,090 | 16,277 | 14,803   | 17,127   | 16,981   | 18,073   | 14,594   | 10,256   | 27,395   | 23,012   | 27,023   |
|  |                 |        |        |          |          |          |          |          |          |          |          |          |
| Basic Earnings per Share                           | (yen)           | 68.50  | 80.79  | 93.05    | 110.11   | 116.43   | 130.00   | 135.64   | 150.11   | 167.30   | 210.68   | 231.06   |
| Net Assets per Share                               | (yen)           | 887.98 | 962.22 | 1,041.82 | 1,141.93 | 1,183.40 | 1,286.36 | 1,376.52 | 1,450.27 | 1,553.10 | 1,688.64 | 1,768.42 |
| Dividend per Share                                 | (yen)           | 25.00  | 27.50  | 32.00    | 39.00    | 43.50    | 52.00    | 62.50    | 67.50    | 79.50    | 105.50   | 118.00   |
| Dividend Payout Ratio                              | (%)             | 36.5   | 34.0   | 34.4     | 35.4     | 37.4     | 40.0     | 46.1     | 45.0     | 47.5     | 50.1     | 51.1     |
| PER  | (times)         | 16.9   | 24.2   | 24.9     | 23.2     | 19.9     | 21.8     | 28.4     | 25.3     | 28.5     | 22.0     | 25.8     |
|  |                 |        |        |          |          |          |          |          |          |          |          |          |
| Number of Employees                                |                 | 753    | 755    | 744      | 752      | 759      | 788      | 819      | 855      | 881      | 916      | 951      |
|  |                 |        |        |          |          |          |          |          |          |          |          |          |

Note: The Company has conducted a stock split of two common shares for everyone common share on July 1, 2019.

# Company Profile/Stock Information (As of June 30, 2022)

## Major Bases



# Our Websites



SHO-BOND MATERIAL CO., LTD. (Japanese version only) https://www.sb-material.co.jp/



SHO-BOND CORPORATION , https://www.sho-bond.co.jp/en/



SHO-BOND official channel (Japanese version only) https://www.youtube.com/channel/UChNSBYmP9fe1gQvtHzWHvoA

# Company Profile

| Company name                             | SHO-BOND Holdings Co., Ltd.   |
|--|---|
| Date of establishment                    | January 4, 2008   |
| Head office                              | 7-8, Nihonbashihakozaki-cho, Chuo-ku, Tokyo, Japan  |
| TEL                                      | +81-3-6892-7101 (Representative)  |
| President and<br>Representative Director | Tatsuya Kishimoto   |
| Amount of capital                        | ¥5.0 billion  |
|  |   |
| Business                                 | Establishment of corporate strategies, management, and related operation of businesses of subsidiaries engaged in civil engineering and construction work contracting, etc.                                   |
| Business<br>Number of employees          | Establishment of corporate strategies, management, and<br>related operation of businesses of subsidiaries engaged in<br>civil engineering and construction work contracting, etc.<br>951 (consolidated basis) |

## Status of Major Shareholders

| Shareholder name  | Number of shares<br>(Thousand shares) | Shareholding ra<br>(%) |
|---|---------------------------------------|------------------------|
| The Master Trust Bank of Japan, Ltd.<br>(Trust account)     | 5,806                                 | 10.91                  |
| General Incorporated Foundation Ueda<br>Memorial Foundation | 5,408                                 | 10.16                  |
| SSBTC CLIENT OMNIBUS ACCOUNT                                | 4,983                                 | 9.36                   |
| Custody Bank of Japan, Ltd. (Trust account)                 | 4,627                                 | 8.69                   |
| MUFG Bank, Ltd.   | 2,658                                 | 4.99                   |
| The Dai-ichi Life Insurance Company, Limited                | 2,420                                 | 4.54                   |
| Custody Bank of Japan, Ltd.<br>(Trust account 4)            | 2,027                                 | 3.81                   |
| NORTHERN TRUST CO. (AVFC) RE FIDELITY<br>Funds              | 1,996                                 | 3.75                   |
| Meiji Yasuda Life Insurance Company                         | 1,584                                 | 2.97                   |
| SMBC Nikko Securities Inc.                                  | 1,025                                 | 1.92                   |

# Stock Price



# Stock Information

| Total number of shares<br>authorized to be issued  | 120,000,000 shares                              |
|--|---|
| Total number of issued shares  | 56,745,180 shares                               |
| Stock exchange listing   | Tokyo Stock Exchange Prime                      |
| Securities code  | 1414  |
| Number of shareholders   | 10,331  |
| Accounting period  | June 30, each year                              |
| Annual general meeting of<br>shareholders  | September each year                             |
| Shareholder registry<br>administrator<br>Account management<br>institution for specific accounts | Mitsubishi UFJ Trust and Banking<br>Corporation |

# Shareholders Ratio (Percentage of Owned Shares)





# SHO-BOND Holdings Co., Ltd.

7-8 Nihonbashihakozaki-cho, Chuo-ku, Tokyo 103-0015, Japan TEL.+81-3-6892-7101 (Representative) https://www.sho-bondhd.jp/english/