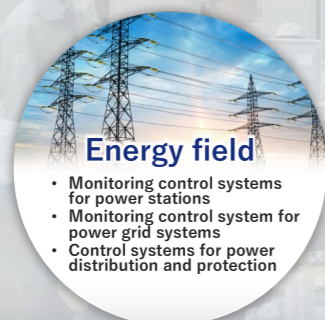


Mission

of Omika Works

Achieve more comfortable and convenient lifestyles by providing mission-critical information and control systems to support social infrastructure, and contribute to the resolution of the social issues exemplified in the SDGs



Energy field

- Monitoring control systems for power stations
- Monitoring control system for power grid systems
- Control systems for power distribution and protection



Railway field

- Operations management systems
- Railway power management systems
- Onboard information display systems



Social and industrial fields

- Monitoring control systems for water and sewage
- Control systems for steel plants
- Production control systems

Information and control components

Security components

Controllers

Control servers

Requirements for social infrastructure

Variety
(Product uniformity)

Reliability and safety

Availability and scalability

Maintainability

Business continuity

Technological capabilities of Omika Works

Mass customization

Energy management

White box development

Use of simulators (digital twin)

SDGs : Sustainable Development Goals

The GO principles: Omika Works' code of conduct

Omika Works has a long-standing code of conduct called the "GO principles" (in which "GO" stands for "Greater Omika"). This platform, which is based on Hitachi's founding philosophy, helps to foster control system engineers who possess both technological skills and social skills.



As we work to become better members of society, we must bear a sense of pride and responsibility in our role as employees of Omika Works, which is charged with the task of advancing society. Through close cooperation, we feel fulfilled in our efforts to carry out this mission as we keep moving forward.

- 1 Take on greater technological challenges
- 2 Work to earn our customers' trust
- 3 Think and act with the perspectives of others in mind
- 4 Create a vibrant, active workplace
- 5 Discipline ourselves and appreciate others

Established August 1970



Supporting social infrastructure

Omika Works

Omika Works Supporting social infrastructure



Selected as a cutting-edge "Lighthouse factory" by the World Economic Forum (WEF)

The World Economic Forum (WEF) has selected Omika Works A cutting-edge “Lighthouse factory”

A first for a Japanese company

103 factories throughout the world have been selected as Lighthouse factories. (as of March 2022)

What is a Lighthouse factory?

In 2018, the World Economic Forum (WEF) launched a program to designate the world's most advanced factories—those leading the Fourth Industrial Revolution—as “Lighthouse” factories.

Why was Omika Works selected?

WEF appreciated our efforts to deliver digital solutions based on our know-how for analyzing data from shop floors, and to optimize the entire value chain including the processes for designing, manufacturing and developing hardware and software and operation maintenance after system testing and delivery. Such efforts ensure the consistent supply and stable operation of social infrastructure information control systems.



1 Hardware design and manufacturing

Highly efficient production models Achieving mass customization

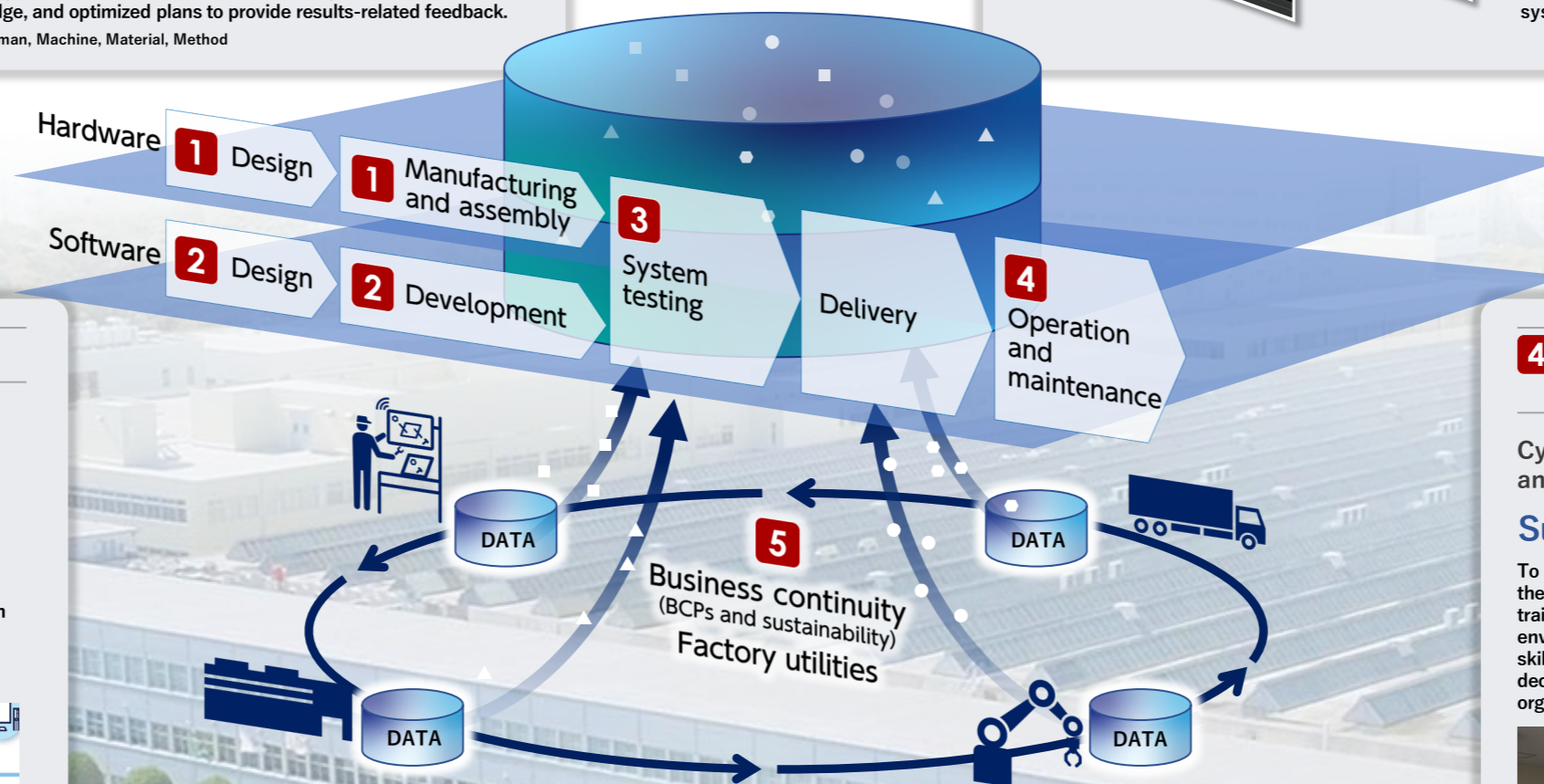
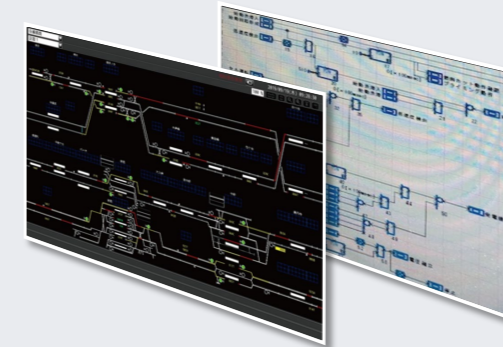
Omika Works has established a highly effective production model that focuses on 4M data from the shop floor to improve the cycle of data collection, analysis, and response. By optimizing the entire production line, we have succeeded in decreasing production lead times by 50% for many of our major products. To achieve this, we improved the visualization of the production shop floor, codified tacit knowledge (which previously depended on specific individuals) into explicit knowledge, automated countermeasures through the use of the explicit knowledge, and optimized plans to provide results-related feedback.

* 4M : human, Machine, Material, Method

3 System testing

Integrated system simulation environment Pursuing absolute quality

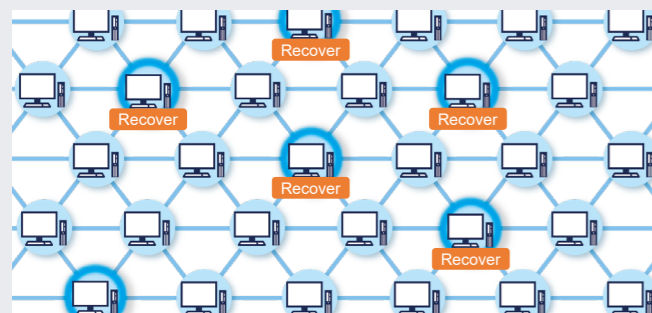
Omika Works has developed a comprehensive system simulation environment. With this system, we can carry out system testing at Omika Works before a system is delivered to the customer and after the system begins operation. For system testing, we use a simulator that mimics the production environment in cyberspace. This allows us to perform comprehensive system tests that cannot be performed in the actual work environment and thereby ensure the quality of the system.



2 Software design and manufacturing

Autonomous decentralized framework Responding flexibly to changes in the market

Social infrastructure must run constantly over a long period of time. Omika Works created a framework from our autonomous and distributed system architecture, which was developed in-house to ensure that systems are scalable and serviceable when the facilities are in use. This framework enables system development and operations that make it possible to flexibly adapt to rapidly changing markets.



4 Support for system operation and maintenance

Cyber defense training and verification facilities and stable operating services

Supporting sophisticated operations

To prepare for the kinds of cyberattacks that serve as new threats in the IoT era, practical training can be conducted in our cyber-defense training and verification facilities, which mimic our customers' system environments. In such training drills, participants acquire operation skills and learn how to provide managers with information required for decision making. We conduct drills to train employees and to improve organization management.



5 Factory utilities

Eco-friendly energy management

Demonstrating business continuity

Omika Works has constructed an energy-saving and resilient FEMS consisting of solar power generators, rechargeable batteries, smart meters and an energy management system (EMS), which provide excellent business continuity. Omika Works has developed into a smart and eco-friendly factory as a result of combining the EMS and production plans to implement peak-load shifting and enabling autonomous operation of solar power generators and rechargeable batteries to improve BCP capabilities.

* FEMS : Factory Energy Management System

