

FACTORY AUTOMATION AND SOCIAL SOLUTIONS

Enhancing the productivity of the *Monozukuri* industry and improving quality of life

Our mission in the Industrial Solutions Business Unit is to realize carbon-neutral *Monozukuri* (manufacturing) from the perspective of “green,” and to build a society that expands human potential from the perspective of “peace of mind.” Guided by this mission, we will work to earnestly address the issues facing our customers, providing them with solutions that resolve such issues in a manner that best suits their needs. By doing so, we will make significant contributions to industrial and social progress.



Jiro Ebihara
Head of FA Business
Development Division

Business Strengths

Production Assets That Have Been Rigorously Honed in the Frontline Manufacturing Operations of Approximately 130 Plants Worldwide

Using our high-quality, highly durable facilities that have been refined on auto part production lines, as well as our core factory automation equipment, such as robots and sensors, we are playing a role in improving productivity throughout the manufacturing industry and society at large while spreading our reach from stand-alone equipment to processes and modules.

Monozukuri Know-How That Has Supported DENSO's Products for More Than 70 Years

DENSO solves serious issues directly affecting the manufacturing industry, such as labor shortages, carbon neutrality and digital transformation (DX), with its know-how in flexible and lean manufacturing and lean automation technologies.

Safe and Secure Solutions for Society Using QR Codes® Developed by DENSO

DENSO creates value for new domains and applications by incorporating outside ideas for using QR Codes® and QR Code® reader technologies that have been evolving since 2000 and which have become an international standard (ISO/IEC 18004).

Resolving Social Issues through Our Businesses

Relevant SDGs



Contributing to the Creation of Industrial and Social Settings Where People and Robots Work Together

DENSO has begun marketing COBOTTA® PRO, a high-speed human-collaborative robot. This new offering achieves industry-leading speed by employing a light, high-rigidity torque sensor that we developed in-house. At the same time, the robot's high-performance contact sensors and a touch-sensing soft cover ensure safety, helping to create industrial and social settings where people work confidently with robots. We are offering solutions not only in areas where robots have been deployed in the past—such as for simple tasks, assembly, and inspection in the manufacturing industry—but also in new areas where automation and collaboration between humans and robots has been considered difficult, such as the weighing, measuring, and serving of food in the food industry. (In recognition of its advanced features, COBOTTA® PRO received a Good Design Award in October 2022.)



COBOTTA® PRO

Note: COBOTTA is a registered trademark of DENSO WAVE INCORPORATED.

Focusing on Addressing Industrial and Social Issues as Creator of the QR Code®

In line with its efforts to create a society where everyone can enjoy a more fulfilling life, DENSO contributes to initiatives that are based on premium merchandise coupons. Many municipal authorities conduct such initiatives to stimulate regional economies. Consequently, the use of digital premium merchandise coupons is increasing. However, some people are being left behind because they do not own compatible devices or are not conversant with digital technologies. In response, DENSO has

developed the QR Code Subsidy Application System, which combines paper merchandise coupons and QR Codes®. Our system provides merchandise coupons and QR Codes® usable by anyone while streamlining the administrative work of municipal authorities and affiliated stores. We have completed provision of the system to an initiative based on merchandise coupons in Nakano Ward, Tokyo. Currently, DENSO is proposing adoption of this system to municipal authorities nationwide.

Providing a Medication Management Service That Contributes to a Healthy, Reassuring Society

One of the challenges associated with society's accelerated aging is the enhancement of home medical care. As the number of patients who take numerous medications at home increases, the provision of error-free environments for taking medications is becoming more important than ever. In addition,



Medicine box with communication functions

pharmacies need to realize centralized medication management and pharmacological guidance. To address these issues, DENSO has collaborated with a healthcare service company to develop a medication management service that utilizes IoT and automatic recognition technology. In the patient's home, a medicine box with communication functions is installed, which automatically detects and records the medication taken out and shares information on medication status with the pharmacy, family members, and other related parties via a server. This service will not only promote safe, reassuring medication management but also help mitigate the financial impact of unused medications on the medical insurance system.