

Value Creation That Draws on DENSO Culture

The DENSO Creed, formulated after overcoming the hardships and challenges we faced since our founding, and the principles enshrined within it provide the source of our value creation to this day. In this section, we introduce iconic examples that embody the four principles of the DENSO Creed and that demonstrate how we have delivered value to our customers and society throughout the years.



1959 Pursuing Efforts to Achieve the Deming Prize Competing on a Global Stage with Quality, Not Price

International competition began to intensify with the approaching liberalization of automotive trade. To survive under such circumstances, we decided to pursue efforts to achieve the Deming Prize, one of the most prestigious awards for quality control. Accordingly, we participated in interviews with companies that had received the prize and attended outside seminars. We also established quality-related educational activities specific to employee rank. Further, study sessions for employees on the front lines were held on a near-daily basis. Without being overly confident in the knowledge and experience we had accumulated in the past, we worked on a Companywide level to learn about quality control and revised the way we approached our work from the bottom up. As a result, in October 1961, we became the first Toyota Group company to receive the Deming Prize. Our efforts toward receiving this prize laid the foundations for the "Quality First" approach and corporate culture that we still embrace to this day.

"Cherish modesty, sincerity, and cooperation."

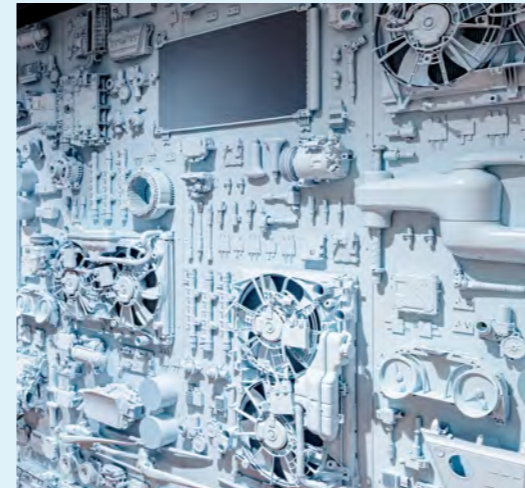
1968 Transition to the In-House Production of Semiconductor Products

Learning and Acting with the Utmost Sincerity So That We Could Pave the Way for the Creation of Products with Social Value

In 1968, we established the IC Research Center in anticipation of the shift to the electronic control of automotive components in the future. Through this center, we commenced the automotive industry's first full-scale development of semiconductors, including their manufacture. We believed that only an automotive component manufacturer such as ourselves could realize semiconductors that operate in the unique environment of an automobile. Accordingly, to provide products that offer true value to society, we worked to acquire production facilities, establish an R&D structure that included external experts, and sought knowledge from large-scale semiconductor manufacturers in other industries. After successfully mass-producing semiconductor products, we continued to challenge ourselves with the development of even more ambitious products, which helped grow electronic-related products, including semiconductors, into one of our mainstay products today.



"Be trustworthy and responsible."



Development of Over 130 World-First Products Creating Technologies That Led the Era

We began to expand from electrical equipment to overall system development, including power transmission and air-conditioning, and promptly established the IC Research Center in anticipation of the shift to the electronic control of automotive components in the future. Through such efforts, we have thus far created over 130 world-first products, including the independent development of robots and QR codes. To this day, we remain determined to further refine our technologies in various fields at our cutting-edge research centers, global technical centers, and other locations with a focus on five to 20 years in the future.

"Be pioneering, innovative, and creative."

Development of QR Codes—Resolving Individual Issues on the Front Line

In the 1990s, frontline manufacturing began to shift toward the production of a wide variety of products in small quantities. Against this backdrop, there was a need to increase barcode capacity in order to manage production in a more meticulous manner. As we started to understand the limitations of improving barcode scanning alone, we commenced the production of two-dimensional codes which have larger capacity than conventional ones. Furthermore, to accelerate reading speed, we analyzed the proportions of various letters and symbols to incorporate ones with unique proportions into these codes. By doing so, we developed QR codes with large capacity and high-speed readability. QR codes are now being used in a wide variety of settings across the world. Particularly, in recent years, QR codes are being put to use in a wider range of areas, such as traceability systems that leverage these codes together with blockchain technology.



Please see the following URL, "Revolutionizing traceability with QR Codes and blockchain," for examples of QR code utilization.
<https://www.denso.com/global/en/news/stories/all/211018-01/blockchain>



1972 Leading the World with the Electronic Control of Engine Combustion

Understanding That We Are Working to Bring Smiles to the People of the Future

The United States became the first country in the world to enact regulations on exhaust gas due to the worsening problem of air pollution. With regulations regarding automobiles becoming more rigid in the 1960s, we developed electronic fuel injection (EFI) systems with a focus on creating an even better tomorrow. As EFI systems have free control over the engine, we believe they could become a future mainstay product that could clear next-generation environmental regulations without sacrificing fuel efficiency and drivability. We therefore commenced the development of these systems even without a previous track record of doing so. Based on the idea that individual components should be thought about, designed, and evaluated based on the overall system that is the automobile, we were able to produce a demo vehicle equipped with an internally developed EFI system. This demo vehicle was introduced to and eventually adopted by our customers. The endeavor reflected our desire to enhance the attractiveness of automobiles while addressing their negative aspects and to provide the highest level of quality possible from the customer's perspective. This desire remains unchanged to this day.

"Provide quality products and services."

