

History of Our Business Evolution and Value Creation

Through manufacturing that leverages our unique technological capabilities in the rubber and plastic fields that we have cultivated since our founding, we respond to the needs of the times and provide new value to the world.

Founding to 1970s

Carrying on the spirit of Kiichiro Toyoda to develop rubber and plastic parts

In the late 1930s, Kiichiro Toyoda, who recognized the importance of rubber parts, established a rubber research department within the automotive division of Toyoda Automatic Loom Works. This was the origin of Toyoda Gosei. Kiichiro Toyoda would later go on to found Toyota Motor Corporation. Kiichiro's passion for research was carried over to Nagoya Rubber Co., Ltd., which was established in 1949. In the 1950s, Nagoya Rubber focused on the development and production of rubber parts for automobiles, and became the first JIS-certified plant in Japan to manufacture hydraulic brake hoses for automobiles. Nagoya Rubber also took on the

challenge of producing plastic steering wheels, which had previously been made of hard rubber. In 1954, the injection molding process was used to produce plastic steering wheels for Model FA trucks, and later, the same process was also used for the plastic steering wheels in the Toyopet Crown model. From the 1960s onward, Nagoya Rubber expanded its business as Japan's automobile industry continued to grow and develop. In 1967, the Company opened the Inazawa Plant to produce plastic parts by injection molding, and subsequently expanded its production bases mainly in the Owari area. In 1973, the Company changed its name to the current Toyoda Gosei Co., Ltd.

1980s to 2000s

Growing into a global company through commitment to research and development

As a member of the Toyota Group, our development and production of rubber and plastic parts for automobiles has expanded into various fields since the 1980s. As a polymer manufacturer, we aim to be a development-oriented company and have strengthened our development capabilities by establishing the Kitajima Technical Center in 1995 and the Miwa Technical Center in 2009. We also turned our attention to fields in other industries, and based on our thin-film formation technology developed in the automotive parts business, from 1986,


we took on the challenge of researching blue LEDs, whose development had numerous technological hurdles that were considered difficult to overcome. In 1995, we succeeded in achieving mass production of blue LEDs. Until the end of the 1980s, Toyoda Gosei's overseas markets consisted of Taiwan and North America under a four-company system, but in the 1990s, we accelerated our overseas expansion. Following North America and Asia, we expanded to Australia, Europe, Central and South America, and Africa, and have now grown into a global company with 62 overseas companies.

1949 1960 1970 1980 1990 2000

Knowledge in the Fields of Rubber and Plastics

 1950 Weatherstrips	 1953 Brake hoses	 1954 Plastic injection steering wheels	 1961 Piston cups	 1974 Instrument panels	 1977 Constant velocity joint boots	 1982 Sound insulating glass runs	 1982 Plastic fuel filler caps
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Experience in Developing New Businesses




Rubber Research Department, Toyoda Automatic Loom Works

The challenge of developing plastic injection steering wheels

In 1952, at the suggestion of Toyota Motor Co., Ltd., one of our major customers, we installed a 48-ounce injection molding machine manufactured by Watson-Stillman Co. of the United States. While some were apprehensive about adopting injection molding, which was still an excessive investment even with financial support from Toyota Motor Co., Ltd., we took a leap of faith and succeeded in putting the equipment into operation. This marked the beginning of the age of plastics for automotive parts.



Injection molding machine



1986
Start of R&D for blue LEDs

The challenge of developing airbags

Toyoda Gosei boasts the top share in the Japanese airbag market. It is easy to assume that Toyoda Gosei began to produce airbags as part of its steering wheel manufacturing business, but in fact, the Company felt a sense of urgency over new commercial rights for Toyota Motor Corporation's first airbag, and the Company felt that it had to develop airbags as quickly as possible, resulting in a bold new challenge against fierce development competition.

World's first



1991
Successful development of blue LEDs is certified


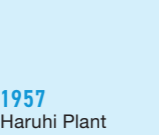
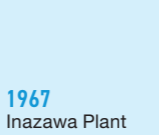
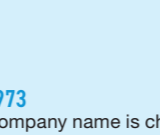
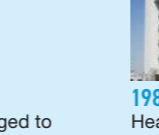

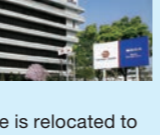
World's first! Successful development of blue LEDs

LEDs are being used in a growing range of fields as an environmentally-friendly light source because of their superior energy-saving performance. It was the commercialization of blue LEDs in the 1990s that made LED products possible. In 1986, under the guidance of Professor Isamu Akasaki of Nagoya University's Faculty of Engineering and with the cooperation of Toyota Central R&D Labs, Toyoda Gosei began developing a gallium nitride (GaN)-based blue LED, which was certified as a success in 1991. Until then, the development of blue LEDs was thought to be impossible. The challenge, which was the first of its kind in the world, was a series of uncertainties and obstacles.



2007
Start of R&D for e-Rubber

Global Network

 1949 Nagoya Rubber Co., Ltd. is established as a spin-off of the rubber research division of Toyota Motor Co., Ltd.	 1957 Haruhi Plant begins operation	 1967 Inazawa Plant begins operation	 1976 Morimachi Plant begins operation	 1977 U.S. Office is established in Illinois	 1980 Head office is relocated to present location (Kiyosu, Aichi Prefecture)	 1982 Bisai Plant begins operation
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 1989 TG Missouri Corporation is established	 1995 Kitajima Technical Center is established	 1999 Toyoda Gosei North America Corporation is established	 2000 Toyota Gosei Europe N.V. is established	 2001 Toyoda Gosei Asia Co., Ltd. is established	 2008 Toyota Gosei Minda India Pvt. Ltd. is established	 2009 Miwa Technical Center is established
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History of Our Business Evolution and Value Creation and Our Competitive Advantages

2010s to Future

Contributing to the future with a focus on safety, comfort, and decarbonization

The 2010s brought new challenges for companies, such as measures to prevent global warming and the achieving of a sustainable society. In the automotive market, vehicles that do not rely on petroleum fuels, such as BEVs (battery electric vehicles), are expected to play a leading role in the future, forcing major changes.

We have developed high-pressure hydrogen tanks for FCEVs (fuel cell electric vehicles) using our polymer technology. This tank, jointly developed with Toyota Motor Corporation, is being used in Toyota's second-generation Mirai model, which started mass production in 2020. In response to the shift to BEVs, we will contribute to the reduction of traffic fatalities by offering

optimal solutions for airbags and seat belts that accommodate the changes in vehicle structure, and we will also innovate vehicle design and manufacturing with our polymer technology for realizing new mobility. Also, we will develop and recycle high-performance materials by utilizing our expertise in polymer materials, and will not only utilize our developed materials and technologies within the Company but also sell them outside the Company, and through these new businesses, we will contribute to achieving a decarbonized and recycling-oriented society. We will continue to provide value to society in the three areas of safety, comfort, and decarbonization through the use of polymer technology.

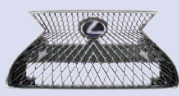
2010

Knowledge in the Fields of Rubber and Plastics

World's first



2010
Lightweight opening trim weatherstrips



2017
Large radiator grilles



2019
Plastic turbo ducts/
Battery cases



2020
Extra-large spindle grilles



2020
High-pressure hydrogen tanks



2021
Driver-side airbags for better protection in angled frontal collisions/
Pedestrian protection airbags



2022
CNF reinforced plastic



2023
Miniature wireless charging holder



2023
Millimeter wave compatible emblem that emits light

Experience in Developing New Businesses



2010
Start of R&D for GaN power semiconductors



2019
Development with EBM Corp. of the SupeR BEAT heart surgery simulator that uses e-Rubber

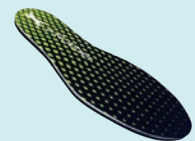


2020
UV-C space disinfectors, which use UV-C (deep UV) LEDs, are launched. UV-C (deep UV) LEDs are confirmed to be highly effective in neutralizing COVID-19

2021
UV-C LED high-speed surface disinfectors



2021
Smart insoles



2022
Success in making larger GaN substrates for next-generation power semiconductors

Global Network

2013
Toyoda Gosei East Japan Co., Ltd. is established



2013
GDBR Industria e Comercio de Componentes Quimicos e de Borracha Ltda. is established



2014
Toyoda Gosei Irapuato Mexico, S.A. de C.V. is established



2018
PT Toyoda Gosei Indonesia is established



2019
Hubei Toyoda Gosei Zheng Ao Rubber And Plastic Sealing Technology Co., Ltd. is established



2020
Inabe Plant begins operation