Links to Resonac's Technology and Society — History

Here we introduce some examples of value provided through technology and products by the former Showa Denko and the former Hitachi Chemical, along with examples of co-creation born from technological synergy since the two companies merged in 2023.
As a "Co-creative Chemical Company," Resonac aims to continuously grow and improve corporate value going forward.

Please also read the "Company History" page on our website.

2023

Resonac established

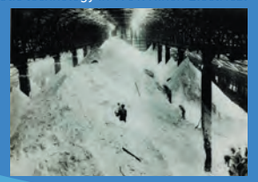
RESONAC

Resonac experienced its second founding, as a functional chemical company that operates the semiconductor and electronic materials, mobility, innovation enabling materials, chemicals, and other businesses, and possesses a broad lineup of material and technology offerings spanning midstream and downstream areas.

Former Showa Denko

1930's
Worked to facilitate use of electricity as a material and foster domestic technology

Established Sobo Marine Products K.K. (later Nihon Iodine K.K.) to manufacture and sell iodine in 1908. Showa Fertilizers K.K. started production of ammonium sulfate (fertilizer) using domestic technology in 1931. Nihon Electrical Industries K.K. (former Nihon Iodine K.K.) succeeded in domestic production of aluminum and its industrialization in 1939. These two companies merged in 1939 to form Showa Denko K.K.



2003
Started chemical recycling that realizes decarbonization and resource recycling

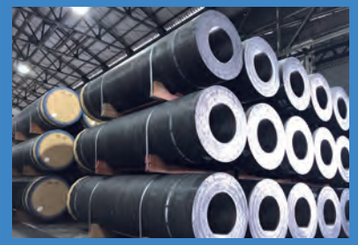
Started the plastic chemical recycling business. Achieved 1 million cumulative tons of plastic recycled in 2022.

2006
Key device contributing to energy saving in all machines that run on electricity

Began contract manufacturing of SiC epitaxial wafers for power devices. Expanding their application in power supplies for data center servers, railcar and EV devices, etc.

2017
Recycling steel resources with the world's highest level of electrode quality

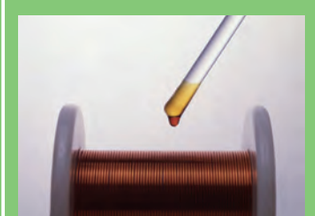
Acquired SGL GE, a graphite electrode supplier, with the aim of further global expansion.



Former Hitachi Chemical (Showa Denko Materials)

1912
Started research into insulating varnish essential for electronic goods aiming at domestic production

The company relied on imported insulating varnish for motors at the time, so it started research and succeeded in producing it domestically in 1914.



1955
Enabled mass production of electronic circuits, a key contributor to the popularization of commercial television.

MCL, copper clad laminates for printed circuit boards, contributed to the realization of mass production of electronic circuits using the same principles of printing.

1992
Contributed to higher density of semiconductors that raise the reliability of electronic devices

Started sale of reflow-resistance epoxy molding compounds, which prevent cracks in semiconductor molding compounds caused by heat.

1998
Achieving improved charging and energy efficiency of electronic devices and their miniaturization

Started mass production of anode materials for lithium-ion batteries that improves charging efficiency.

2001
Contributing to the future of mobility with weight reduction

Succeeded in manufacturing molded plastic rear door modules for the first time in Japan, using our resin molding technology cultivated over many years Contributed to improved efficiency and reduced CO_2 through lower weight, playing an important role in the advancement of CASE*1.

*1 CASE (Connected, Autonomous, Shared & Service, and Electric)

Co-creation Case Studies

Contributing to further miniaturization of circuits with development of photosensitive film

Through co-creation with the polymer synthesis technology of the Functional Chemicals Business Unit and the Photosensitive Materials Business Unit, a new photosensitive film was developed, enabling even finer and denser printed circuit board circuits.

Expanding the analytical column "Shodex" × "Gelpack" product lineup and strengthening its manufacturing system

As a result of the merger, analytical columns sold by both the former Showa Denko and the former Hitachi Chemical have been added to Resonac's lineup since the merger, promoting co-creation leveraging the strength of both companies. Aims to improve analytical column performance by improving packing materials (material particles).

See the following pages for more case studies:
P39 / Co-creation Case Studies in Each Business
P68 / Co-creation Case Studies Using Computational Science