Achieve Change

What's kesonac r

Former Showa Denko

Originating in the field of electrochemistry, Showa Denko has developed its technological capabilities over the course of years to expand into the fields of inorganic chemistry, organic chemistry, and metal materials. Many of its past technological achievements have been passed down to serve the development of a wide variety of products in use today, including materials and components used for IT equipment and mobility devices as well as essential daily items.

1908

Established Sobo Marine Products K.K. (later Nihon Iodine K.K.) to manufacture and sell indine



1931

Started production of ammonium sulfate using domestic technology (Showa Fertilizers K.K.)

1934

Showa Fertilizers and Nihon Electrical Industries Industrialized domestically produced aluminum (Nihon Electrical Industries

1939

Established Showa Denko

K.K. through the merger of



K.K. (former Nihon Iodine K.K.))

What is Resonac? We will introduce Resonac's past and now, including the path to Resonac's birth, how we create value, and what is the "Co-creative Chemical Company" we are trying to achieve.

Path to the Birth of Resonac

Overview of Resonac's Business

Value Creation Process

Special Feature: What is a Co-creative Chemical Company?

17 — Financial and Nonfinancial Highlights

Former Hitachi Chemical (Showa Denko Materials)

1912

Started research into insulating varnish for electrical motors aiming at domestic production



Electrical insulating

1930 Started trial production of

phenol resin laminates carbon brushes

1933

Started trial production of

Started trial production of porcelain insulators

Society's needs and the value we provide to society

Stable food supply

Value we provide

Ammonia production using Japanese technology

Succeeded in synthesizing ammonia for the first time in Japan using Japanese technology and machinery, a feat considered impossible at the time. We then went on to produce the first synthetic ammonium sulfate (inorganic fertilizer) made using only Japanese technology, and started providing inexpensive fertilizer.

Society's needs Innovation of technology

Value we provide

Copper clad laminates for multilaver PWBs

Developed technique to enable complicated wiring on a single copper clad laminate board, which enabled mass production of electronic circuits, a key contributor to the popularization of commercial television and radio systems.

Acquired SGL GE, a

German graphite

electrode supplier

2017

1988

Entered the hard disk media business

1969 Oita Petrochemical Complex started commercial operation



Office of Oita Petrochemical Complex

2001

Merged with Showa Aluminum Corporation Product lineup included aluminum cooling devices, cylinders, and packaging



Aluminum cylinders

2003

Started the plastic chemical recycling business

Purpose and Values



Kawasaki Plastic Chemical Recycling (KPR) plant

2006

Began contract manufacturing of SiC epitaxial wafer for power devices

2009

Started production of cooling devices for power semiconductors



Cooling devices for power semiconductors

2010

Merged with Showa Highpolymer Co., Ltd., the first company to achieve domestic production of synthetic resin emulsion, unsaturated polyester resin, etc.

Graphite electrodes

2022 **Substantive** integration

Resonac experienced its second founding, as a company that operates the semiconductor and electronic materials, mobility, innovation enabling materials, chemicals, and other businesses, and possesses a broad lineup of

> As a "Co-creative Chemical Company," Resonac aims to continuously grow and improve corporate value through co-creation.

material and technology offerings spanning

midstream and downstream areas.

2023

Resonac established

RESONAC

1955

Started production of copper clad laminates for multilayer PWBs

1978

Started sale of photosensitive film of alkali-based solvents



Photosensitive film of alkali-hased solvents

1984

Started production of circuit connecting film for displays



Circuit connecting film for displays

1992

Started sale of reflowresistance epoxy molding compounds



Epoxy molding compounds

1998

Started mass production of carbon anode materials for lithium-ion batteries Started production of CMP slurry for shallow trench isolation (STI)



CMP slurry

2001

Started production of molded plastic rear door modules







Aluminum can recycling activities

Resonac, the first producer of aluminum cans in Japan, was the first to kick-start and spearhead recycling activities in Japan to create a recycling-oriented society. In 2021, the ratio of aluminum cans recycled across Japan rose to as high as 96.6%.

Society's needs

Innovation of technology (longevity)



Anode materials

Production of graphite material used to make anodes, which affect the performance of lithium-ion batteries. They enable electronic devices to be more energy efficient, more compact, and charge more efficiently.

Society's needs Weight reduction

Value we provide Plastic rear doors

Succeeded in manufacturing molded plastic rear door modules for the first time in Japan, Enabled more design freedom and lighter car bodies at a time when metal backdoor was the norm.



Innovation of technology

Value we provide Hard disk (HD)

Successfully mass-produced the world's first large-storage hard disk media for perpendicular magnetic recording. Used to safely and securely store large amounts of data, such as at data centers.



Energy saving Value we provide

SiC



A material used in next-generation power semiconductors, expected to save energy. Used in power supplies for data center servers, railcar devices, etc.