Corporate History

Fuji Electric continues to evolve in step with the times and with society, with technology as our driving force.

Corporate History

Fuji Electric Manufacturing Co., Ltd. Established

Established as a capital and technology alliance between Japan Furukawa Electric Co., Ltd. and German Siemens AG The result is a company with characteristics inherited from industry in both countrie





Started operation of the Kawasaki factory

Started manufacturing

electrical machinery

Started transformer

Began electric fan

production

Established Fuji Tsushinki Manufacturing Co., Ltd. (present Fujitsu Limited) by spinning off the

1942

Started operation of the Matsumoto factory

Started operation of the Fukiage and Toyoda factories

1944

Started operation of the Mie factory

1961

Started operation of the Chiba factory

1968

1960

Merged with Kawasaki Denki Seizo Co., Ltd. and commenced operations at the Kobe and Suzuka factories

Started operation of the

Otawara factory

Established its symbol mark

FUJI

Established Fuji Electric Corporate Research and Development Ltd.

Changed company name to Fuji Electric

to stipulate the corporate mission and guiding principles

 Started operation of the Yamanashi factory

Laid down 21st Century Vision

Laid down Basic Policies of the Fuji Electric on Environment Protection

Established Fuii Electric Frontier Co. Ltd. (Preferential affiliate company)

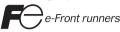
Began promoting employment for disabled persons

Fuji Electric Construction Co., Ltd. (current Fuji Furukawa Engineering & Construction Co., Ltd.) listed on the Second Section of the Tokyo Stock Exchange

Introduced the company system

2002

Introduced group brands



Changed name owing to shift to pure holding

company system Fuji Electric Holdings Co., Ltd.

2006

Started operation of solar cell factory in Kumamoto Prefecture

2008

 Established METAWATER Co., Ltd. (joint venture with NGK Insulators, Ltd.)

Fuji Electric FA Components & Systems Co., Ltd. merged operations with Schneider Electric Japan Ltd.

· Establishment of GE Fuji Meter Co., Ltd. (joint venture

Changed company Fuji Electric Co., Ltd.

(Merger of Fuji Electric Holdings Co., Ltd. with Fuji Electric Systems Co., Ltd.)

Introduced new brand statements

Innovating Energy Technology

2011

1920 1930 1940 1950

magnet switch



breaker production

1936 **Built its first** 4,850HP Francis **Turbine**



production

Technology and

Product History

· Started ultra-compact production



1930

Launched

mercury-vapor

Started expansion circuit

hydraulic turbine,



Began watt-hour meter

1954



In response to exploding demand for televisions and radios. Fuii Electric began volume production of selenium rectifiers. electronic components

that convert alternating current (AC) to direct current (DC). The company soon took an 80%-90% share of the domestic selenium rectifier market.

1955

Started manufacturing juicers Sales of juicers took off from

around 1961 on the back of nationwide health movement (campaign).

Full-scale foray into thermal power plant business

Signed a contract with Siemens AG for technology transfer of the steam turbine manufacturing. Subsequently delivered the first super-critical, variable pressure turbine in Japan, which was one of the largest in the country at the time. This move to import European technology marked a change of tack in a domestic power generation market dominated by US technology

1958

Delivered the first electronic instrumentation system to a water treatment plant in Japar

Electric propulsion system fitted to Antarctic



1966 Tokai nuclear power station began operation

Facility equipped with nuclear pressure vessels and other components made by Fuji Electric



wider spread of

made vending

domestically

machines.

Developed earth-leakage circuit

1969 Began production of vending machines

Used know-how as a vendor of refrigerated milk showcases to move into vending machines. Delivered 230 beverage vending machines to the 1970 Osaka World Exposition prompting the

1970

Developed centralized monitoring and control systems for power utility companies

First computerized control system in Japan, using the FACOM-R mini-computer

Started hybrid IC manufacture

Began production of selenium photoconductive drums

Started manufacturing general-purpose inverters

First in the industry to develop general-purpose inverters. Led the market in creating smaller, more responsive and functional components, resulting in their adoption in a range of fields due to their energy-saving characteristic^e



Developed transistor inverter FRENIC 5000G

Began research into amorphous solar cells

1980

Developed and commenced manufacture of electric propulsion system for ice-breaking vessel Shirase

Developed 30kW phosphoric acid fuel cell

1985 1st generation mini UPS "M-UPS Series" launched



Released the programmable logic controller "MICREX-F Series"



Developed 1,000kW phosphoric acid fuel cell

1987

New IC chip for auto-focus cameras completed Developed IGBT module

Realization of EIC integrated control system

1990

Developed 2.5-inch magnetic

1992

 Began development of solar cells formed on film substrates Completed an ozone-based

water treatment system

Delivered the first generator (600MW output) of Noshiro Power Station

· Completed a ski lift gate svstem

1994 Successful launch of Japan's first HII rocket The launch vehicle's power control

unit was fitted with an aerospace

power transistor made by Fuji

Successful field experiment of the world's first linear-motor-driven vertical transport systems



in electric railways (world's first large-capacity flat

1998 Delivered 100kW phosphoric acid fuel cell

"J-Series"

2000

Established biogas-powered fuel cell power generation

Delivered Japan's first fuel cell cogeneration system (incorporating two 100kW fuel cells) powered by digested sewage sludge gas.

2006 Commenced mass production of film substrate amorphous

solar cells Began mass producing flexible amorphous solar cells based on

plastic film

substrate

aluminium

substrate media

2007 **Started mass production** of perpendicular magnetic recording

media Full-scale mass production of world's largest capacity 2.5-inch glass substrate media (160GB/disk), 3.5-inch

(334GB/disk). High-voltage drop/dip compensator using a lithium-ion capacitor

released. The world's first embedded lithium-ion capacitor realized environmental load reduction in a significantly smaller package

2010

2010

Fuji Electric Systems

uninterruptible power

Co., Ltd. merged

supply (UPS)

operations with

TDK-Lambda

Corporation

Developed a new three-level converter circuit and a new three-level power module, realizing highly efficient electric power conversion



140MW geothermal power plant, the largest single-unit capacity in the world, started operation



High-speed electric vehicle battery charger went on sale



Delivered micro-arid system to outlying islands of Kyushu and Okinawa, and took part in installation and verification testing

Development of next-generation SiC module power semiconductor

High-Voltage **Inverter with Water-Cooling** System "FRENIC 4800VM5" went on sale

2012 **Development of** industrial inverter equipped with next-generation power semiconductor SiC-SBD, a first



New mini-UPS Began manufacturing silicon diodes 25 FUJI ELECTRIC CO., LTD. Corporate Profile 2012 26