

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

## Corporate History

**1923**  
 ■ **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 countries.



**1925**  
 ■ Began operation of the **Kawasaki Factory**

**1935**  
 ■ Established **Fuji Tsushinki Manufacturing Co., Ltd.** (present **Fujitsu Limited**), by spinning off the Telephone Department

**1942**  
 ■ Began operation of the **Matsumoto Factory**

**1943**  
 ■ Began operation of the **Fukiage and Toyoda factories**

**1944**  
 ■ Began operation of the **Mie Factory**

**1961**  
 ■ Began operation of the **Chiba Factory**

**1968**  
 ■ Merged with **Kawasaki Denki Seizo Co., Ltd.**, and commenced operations at the **Kobe and Suzuka factories**

**1973**  
 ■ Began operation of the **Otawara Factory**

**1984**  
 ■ Changed company name to **Fuji Electric Co., Ltd.**

**1991**  
 ■ Began operation of the **Yamanashi Factory**

**2002**  
 ■ Introduced Company symbol mark

**2003**  
 ■ Changed name to **Fuji Electric Holdings Co., Ltd.**, owing to shift to pure holding company system

**2008**  
 ■ Established **METAWATER Co., Ltd.**, (joint venture with NGK Insulators, Ltd.)

■ **Fuji Electric FA Components & Systems Co., Ltd.**, merged operation with **Schneider Electric Japan Ltd.** (Power distribution and control equipment joint venture)

**2011**  
 ■ Changed company name to **Fuji Electric Co., Ltd.**  
 ■ Established **GE Fuji Meter Co., Ltd.** (joint venture with General Electric)

**2012**  
 ■ Introduced brand statement

**2013**  
 ■ Began operation of the factory at **Fuji Electric Manufacturing (Thailand) Co., Ltd.**

**2014**  
 ■ Created new corporate brand emblem for products  
  
 ■ Established **Fuji SMBE Pte. Ltd.** (Singapore)

**2015**  
 ■ Established **Reliable Turbine Services LLC** (United States)  
 ■ Completed new power semiconductor research and development building at **Matsumoto Factory**

**2016**  
 ■ Established **Fuji N2telligence GmbH** (Germany)  
 ■ Established **Fuji CAC Joint Stock Company** (Vietnam)  
 ■ Established **Fuji SEMEC Inc.** (Canada)  
 ■ Completed new Companywide research and development building at **Tokyo Factory**

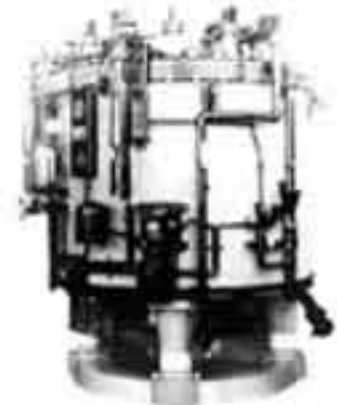
## 1920-1980

**1924**  
 ■ Began manufacturing electrical machinery

**1925**  
 ■ Began transformer production

**1927**  
 ■ Began electric fan production

**1930**  
 ■ Launched **mercury-vapor rectifier production**



**1933**  
 ■ Began expansion circuit breaker production

**1936**  
 ■ Built first hydraulic turbine, **4,850HP Francis Turbine**



**1937**  
 ■ Began watt-hour meter production

**1954**  
 ■ Began ultra-compact magnetic switch production

■ Began volume production of **selenium rectifiers**  
 In response to exploding demand for televisions and radios, Fuji 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**  
 ■ Began manufacturing **juicers**  
 Sales of juicers took off from around 1961, playing a role in a 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 U.S. technology.

**1959**  
 ■ Began manufacturing silicon diodes

**1965**  
 ■ **Electric propulsion system fitted to Antarctic exploration ship *Fuji***

**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 wider spread of domestically made vending machines.

**1971**  
 ■ Developed **centralized monitoring and control systems for power utility companies**  
 First computerized control system in Japan, using the FACOM-R mini-computer.

■ Began **hybrid IC manufacture**

**1973**  
 ■ Began production of **selenium photoconductive drums**

**1976**  
 ■ Began manufacturing **general-purpose inverters**  
 First in the industry to develop general-purpose inverters.

■ Developed **transistor inverter FRENIC5000G**

**1978**  
 ■ Began research into **amorphous solar cells**

**1981**  
 ■ Developed and commenced manufacture of **electric propulsion system for ice-breaking ship *Shirase***

**1985**  
 ■ **First generation mini UPS "M-UPS Series" launched**

■ Released the **programmable logic controller "MICREX-F Series"**

■ Developed **1,000kW phosphoric acid fuel cell**

**1987**  
 ■ Developed **IGBT module**

## 1990

**1991**  
 ■ Developed **2.5-inch magnetic disks**

**1992**  
 ■ Began development of **solar cells formed on film substrates**

■ Completed an **ozone-based water treatment system**

**1993**  
 ■ Delivered the first generator (**600MW output**) of **Noshiro Power Station**

■ Completed a **ski lift gate system**

**1996**  
 ■ Won order for **IGBT main conversion devices used in electric railways (world's first large-capacity flat IGBT)**



**1998**  
 ■ Delivered **100kW phosphoric acid fuel cell**

**1999**  
 ■ **New mini-UPS "J-Series" launched**



## 2000

**2006**  
 ■ Commenced mass production of **film substrate amorphous solar cells**  
 Began mass-producing flexible amorphous solar cells based on plastic film substrates.

**2007**  
 ■ Began 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 aluminium substrate media (334GB/disk).

**2009**  
 ■ Released **high-voltage drop/dip compensator using a lithium-ion capacitor**  
 The world's first embedded lithium-ion capacitor realized environmental impact reduction with a significantly smaller package.

## 2010

**2010**  
 ■ 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**

■ **Development of next-generation SiC module power semiconductor**

**2011**  
 ■ Launched sales of **medium-voltage inverter with water-cooling system "FRENIC4800VM5"**

**2012**  
 ■ Launched dedicated inverters for air-conditioning and water treatment systems, **FRENIC-HVAC and FRENIC-AQUA**  
 ■ Development of inverter equipped with next-generation power semiconductor **SiC-SBD, a first in Japan**

■ Launched **power conditioning sub-system for mega solar power generation systems**

**2014**  
 ■ Launched power electronics equipped with **SiC power semiconductors**

■ **Power conditioning sub-system for high-capacity mega solar use**

**2015**  
 ■ Launched **aerosol analyzers**  
 Began contributing to elucidation of nature of **PM2.5**

■ Launched **steam-generation heat pumps**  
 Started making contributions to energy savings through recycling of low-temperature factory exhaust heat

## Technology and Product History