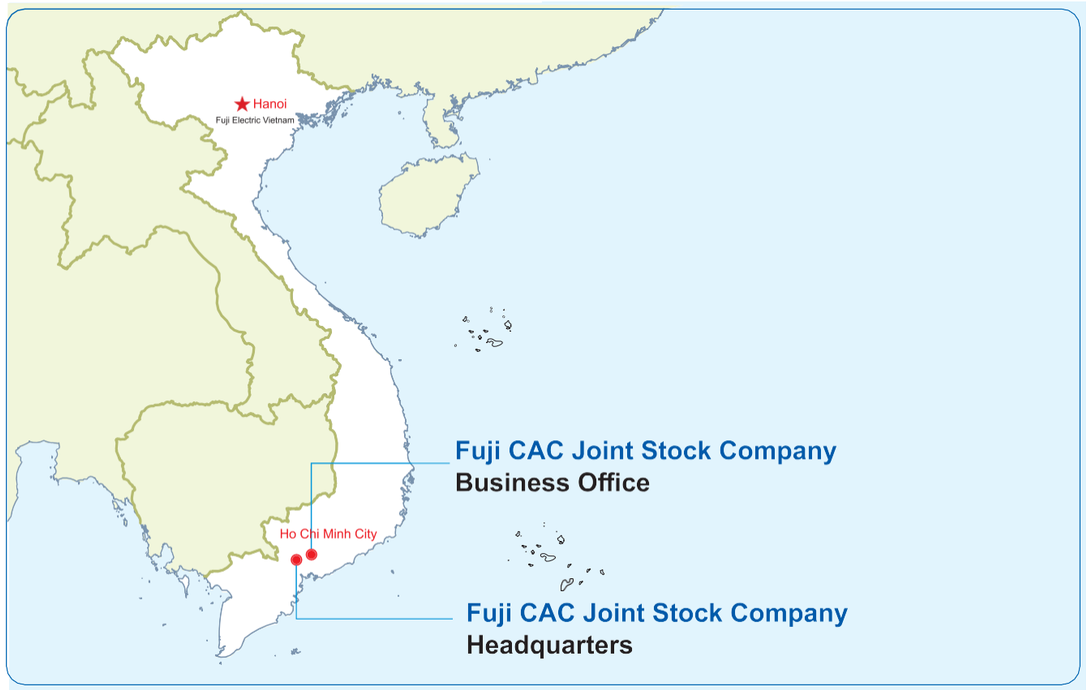
CONTACT US



Fuji Electric In Southeast Asia

Singapore
Fuji Electric Asia Pacific

Thailand
Fuji Electric Thailand

Indonesia
Fuji Electric Indonesia

Vietnam
Fuji Electric Vietnam
Fuji CAC Joint Stock Company

Cambodia
Fuji Electric (Cambodia)

Myanmar
Fuji Electric (Myanmar)

Fuji CAC Joint Stock Company

Business Office:
An Phu Building, 4th Floor, 43-45 Thao Dien, An Khanh Ward,
Ho Chi Minh City, Vietnam.
Tel: +84 28 3742 0959
Fax: +84 28 3742 0891
Website: www.fujicac.com

Headquarters:
938A9 Street A, Cat Lai Industrial Zone, Cat Lai Ward,
Ho Chi Minh City, Vietnam.
Tel: +84 28 3742 3076
Fax: +84 28 3742 3077
Website: www.fujicac.com

Innovating Energy Technology

Corporate Profile

Fuji CAC Joint Stock Company

FUJI CAC JOINT STOCK COMPANY

Corporate Outline

Company name
Fuji CAC Joint Stock Company
(A company of Fuji Electric Group)

Established
1995

Business Office
An Phu Building, 4th Floor, 43-45 Thao Dien,
An Khanh Ward, Ho Chi Minh City, Vietnam.

Headquarters
938A9 Street A, Cat Lai Industrial Zone,
Cat Lai Ward, Ho Chi Minh City, Vietnam.

Tel: +84 28 3742 0959
Fax: +84 28 3742 0891
Email: fujicac-contact@fujielectric.com
Website: www.fujicac.com

About Us

Since the establishment in 1995, Fuji CAC has been writing our story of success. Starting at an electrical and instrumentation service provider, Fuji CAC has grown to become one of the most reliable and respected engineering, procurement, construction, and maintenance contractor for multiple business sectors in Vietnam and Southeast Asia countries.

On December 10 of 2015, Fuji Electric Co., Ltd (FE) - with Revenue of ¥813.6 billion (equivalent US$8 billion) and 26,508 employees - concluded a contract to acquire a 65% stake in CAC Joint Stock Company (CAC). FE will maximize the use of CAC's engineering functions to jointly expand business operations in Asia through its five business segments: Power and Social Infrastructure, Industrial Infrastructure, Power Electronics, Electronic Devices, and Food and Beverage Distribution.

Vision

Achieve the goal of being the leading solution company in the industrial electrical market of Southeast Asia and acting as Southeast Asia Engineering Center of Fuji Electric.

Mission

Dedicated to providing optimal solutions that are able to meet the customer's specifications & requirements with the following objectives:

1. Apply and provide innovative solution to deliver Fit – For – Purpose products and services.
2. Continuously focus to improve HSE standards and protect our environment.
3. Ensure the best EPC competitiveness with Human Resource/ Technology/ Quality that meets international standards.
4. Offer integrated services from conceptual design to final commissioning and start-up.

Core Value

[C] Creative to
Develop innovative solution to build a green industrial world.

[A] Association to
Provide our clients professional solutions, products also services with stable quality as clients's demand.
Provide our clients the highest value added and value distribution to develop the Vietnamese and Asian industries.
Build investment value for clients, partners, and owners based on professionalism, integrity, and equality.

[C] Commitment to
Become one of the leading companies of total industrial solution providing in Vietnam and Southeast Asia with high techniques, advanced technologies, and professional after-sales services.
Provide services along with the entire life-cycle of our customer investment.
Together we have built Fuji CAC to become strong, leading, and trusted Solution Provider in Vietnam.

Main Business

Fuji CAC is known as the leading Industrial Solution Provider in Electrical, Automation & Control market, and now acting as a Main MEP Contractor (complete scope of Electrical, Control, HVAC, and Piping & Firefighting) in Vietnam and Southeast Asia Countries.

Founded in 1995, Fuji CAC has been keeping the stable development and becoming a trusted solutions and services provider for many well-known International & local companies in Food & Beverage, Chemical, Oil & Gas, Power, Cement, Infrastructure & Facility, Solar & Renewable Energy ...

Fuji CAC also has experienced in implementing projects & services overseas in African and Asian countries.


FOOD & BEVERAGE


OIL & GAS, POWER


CHEMICAL & FERTILIZER


INFRASTRUCTURE & FACILITY


CEMENT & CONSTRUCTION MATERIAL


SOLAR & RENEWABLE ENERGY

Fuji CAC History

- 1995 • CAC Company Establishment
- 2001 • ISO 9001- 1994 Certificate. • 1st EP Package Oversea Project
- 2002 • Workshop Establishment
- 2005 • Complete Electrical, Instrumentation & Automation Package
- 2008 • EPC Contract to build up the Complete Cement Plant
- 2011 • ISO 9001-2008 TUV Certificate
- 2014 • F&B project in Myanmar
- 2015 • F&B project in Cambodia
- 2016 • Fuji Electric's Capital Participation

Manpower

At Fuji CAC we focus on building great people who do extraordinary things. Our greatest assets are our workforce.

Our high enthusiasm and professional workforce are well-trained to:
- Proactive involve all the details of installation, modification, troubleshooting and maintenance programs.
- Motivated to identify the opportunities to reduce operational cost and improve operational efficiency.
- Effectively manage external contractors or suppliers in all process control & instrumentation works.

Fuji CAC team always has the most advantage tools and systems in hand that guarantee reliability and best performance. With the strong commitment of our Senior Project Management Team, Safety Officer, Site Management Team and the most reliable subcontractor, we assure our customers the highest quality, safety and timely completion of projects.

HSE (Health, Safety and Environment)

"Strictly follow the HSE Policy to avoid any possible incidents. If a task cannot be executed in a safe manner, then we definitely will not do it until a totally safe approach is arrived to."
- Nguyen Viet Trung, General Director of Fuji CAC.

Fuji CAC is committed to providing the highest level of safety at all time. Corporate HSE Policy has been developed and continually managed to meet the international HSE standards. We ensure all the products we use and supply are environment friendly and safety guaranteed.

Fuji CAC HSE 4 GOLDEN GOALS:
- Manage Perfect Safety Record By All Means
- No Lost Time Injury
- Accident-Free Environment
- Zero Environment Damage

HSE MANAGEMENT SYSTEM
Corporate HSE programs are binding for every employee. We dedicated to circulating our HSE management system to the level of understanding of each employee; this is getting done through regular HSE training program for both site and office personnel.

Workshop

The investments in 3,000 m² workshop are Fuji CAC determination to ensure our company able to provide the highest quality service standard to take on any critical tasks that our clients request.

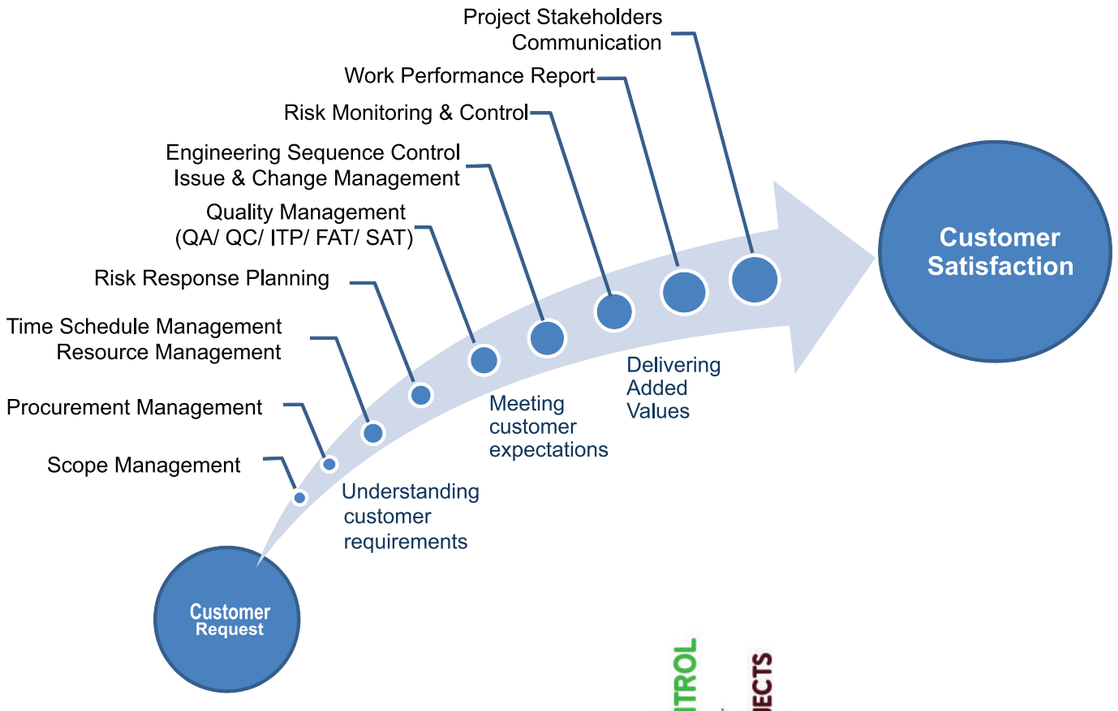
Main Purpose of workshop:
- To supply Low voltage switchgear (MDB, MCC, DB) & Control cabinet for End Users/ Contractors & Fuji CAC project.

The benefit that workshop can offer to Clients:
- Supply on-demand Low voltage switchgear & Control cabinet.
- Offer well-equipped facilities for FAT (Factory Acceptance Test) in-house.
- To complete Fuji CAC product & service portfolio as "one stop shopping": Design – Fabricate – FAT – Supply – Installation – Commissioning – SAT (Site Acceptance Test) & Hand over Cover all service and products from workshop.
- LV switchgear/ MCC, Distribution panel, Control Panel, Gas Analyzer Panel.

Project & Engineering Management

The project manager is at the heart of every successful project. Fuji CAC not only provides a highly qualified and dedicated project manager team to each client but also applies the International PM Standard for Project implementation (PMI).

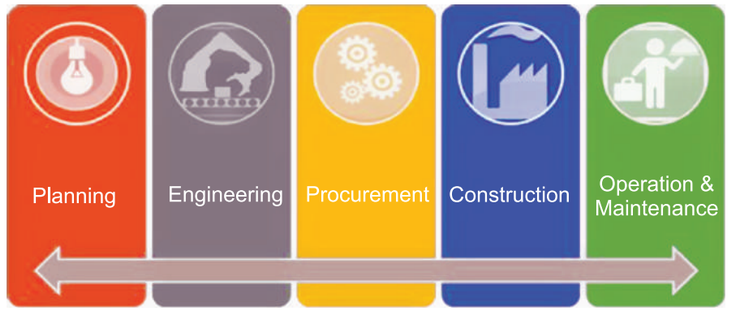
Project management dedicated to providing the optimal solution, discipline, commitment, expertise and successful detail execution leads to project success for Fuji CAC. Positioning as one-stop destination, Fuji CAC extremely focus on having the best Project Manager Team and contractor management services in the business equates to well-run EPC projectand maintenance sites for our clients.



One-Stop Shop Service

To assist in the goal of becoming a total solution provider that carries out projects in a comprehensive manner, Fuji CAC has established the Project Planning, Engineering, Procurement, Construction, and Service Department. We also continue to secure essential capabilities for each process, including the development of independent workshop.
In addition, Fuji CAC will provide greater satisfaction and services to customers by further strengthening our score expertise and the latest technology.

The idea is to provide convenient and efficient services and also to create the opportunity for our customers. Our engagement covers a wide professional services.



- Engineering (Electrical, Instrumentation) & Design.
- Procurement with emphasis on fast and timely delivery, with additional service from Fuji CAC engineering Expertise Team.
- Construction Management, Construction Supervision and Installation.
- Third Party Inspection Services.
- Testing & Commissioning.
- Maintenance & Upgrade.
- Turnkey Projects.
- Start-up.
- Shutdown.
- Hot Changeover.
- Total Project Management, Project Execution Planning, Project Cost Control.
- On-call services 24 hours a day, 7 days a week, to prepare for unexpected emergencies.

Quality Assurance & Control

Dedicated to delivering excellent services that meet and exceed customers' expectations in each and every stage of projects and services" - Corporate Quality Policy Statement


Certificate

Standard ISO 9001:2015
Certificate Regstr. No. 01 100 117240
Certificate Holder: FUJI CAC JOINT STOCK COMPANY
No. 3E/8, Tran Nao Street, Quarter 2, Binh An Ward, District 2, Ho Chi Minh City, Vietnam
Scope: Design, provision, installation and commissioning of electrical and automatic system. Erection and installation of industrial electrical system, mechanical and automatic production lines. Provision of automation technology solutions. Maintenance and repair of electrical, automation and mechanical equipment. Trading of electrical, IT equipment and its accessories.
Proof has been furnished by means of an audit that the requirements of ISO 9001:2015 are met.
Validity: The certificate is valid from 31.07.2018 until 18.12.2020. First certification 2011
31.07.2018
www.tuv.com
TÜVRheinland® Precisely Right.

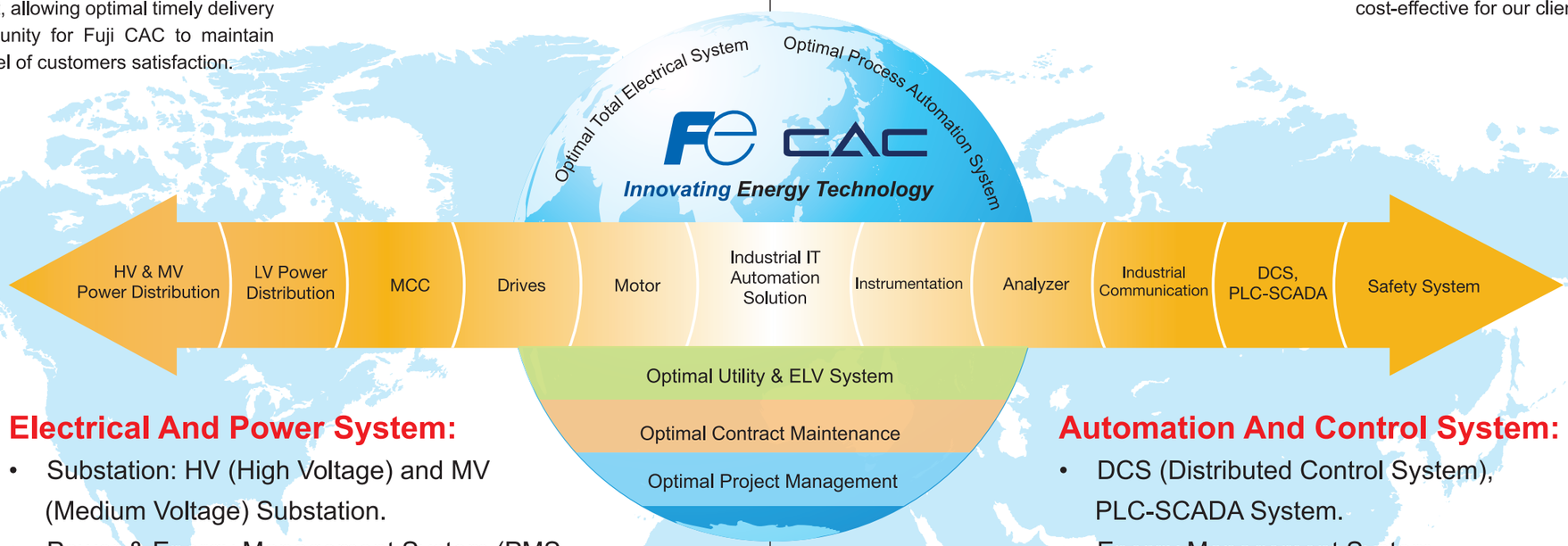
Fuji CAC takes pride and honor in declaring the company commitment to satisfy Fuji CAC customers by the culture of Driven to deliver excellence. It has been accredited with internationally acclaimed Quality Management Certificate ISO 9001:1994 for many years and in July 2018 the Certification was upgraded to ISO 9001:2015 Certificate by Prestige Global TÜV Rheinland Quality Assurance.

Fuji CAC Internal Quality Management Systems guarantees that all customer requirements are met, all processes are properly controlled and continuous improvement is pursued. All Fuji CAC's employees are acting upon the protocol that every project conducted in highly flexible way with quality, functionality, on–time delivery, cost-effective and with our customers'specific needs as principal focus.

Business Model

Fuji CAC deliver Fit - For - Purpose on Full Project Life-cycle, from Engineering, Design, Completion to Start Up and Maintenance, that optimizes the process performance while reducing operating & maintenance cost, allowing optimal timely delivery and thus creating an opportunity for Fuji CAC to maintain continuity and the highest level of customers satisfaction.

Our solid expertise and over 20 years of extensive experience in Electrical and Automation Systems guarantee the most reliable, high quality and cost-effective for our clients.



Electrical And Power System:

- Substation: HV (High Voltage) and MV (Medium Voltage) Substation.
- Power & Energy Management System (PMS & EMS).
- Power Distribution System: From HV/MV to LV Distribution.
- Power Equipment: MV/LV Switchgear, DB (Distribution Board), Busduct, Transformer.
- Emergency Backup Power: Generator & UPS.

Automation And Control System:

- DCS (Distributed Control System), PLC-SCADA System.
- Energy Management System.
- Safety System, Industrial IT Systems.
- Process Instrument, Gas Analyzer, Industrial weighing System.
- Process Control Valves.

Telecommunications & ELV (Extra Low Voltage) System:

- Fire Alarm systems, Security/Access Control.
- Closed-Circuit Television (CCTV) & Master Antenna Television (MATV).
- Telephone & data (cabling, PABX).
- Public Address (PA).

HVAC (Heating, Ventilation and Air Conditioning) System:

- Variable Refrigerant Volume (VRV) systems.
- Chilled Water Systems.
- Fresh air, ventilation and exhaust systems.
- Cold room Unit.
- Building Management System (BMS).

Process Piping System:

- Complete detail design, equipment supply & welding and installation service for Piping system:

  Main Steam line, Main Condensate line, Vaporized CO_2, Low Pressure Compressed Air, Raw Water, RO Treated Water, Chilled Water, Pipe support…

Plumbing & Fire Fighting System:

- Hydrant system Pump House.
- Piping Distribution.
- Sprinkler system.
- Water drainage and plumbing system.

Focus Industries — FOOD & BEVERAGE

SCOPE OF WORK

- Detailed Engineering.
- Procurement, Cost & Schedule Control.
- Power & Energy Management System (PMS & EMS).

SCOPE OF SUPPLY:

Electrical & Automation System

- Process Automation System.
- Power & Energy Management System (PMS & EMS).
- Main & Sub power station: from 6.6 -110KV.
- Power Distribution Equipment: MV Switchgear, MDB, MCC, Transformer, Busduct, Distribution Panel.
- Lighting System: LED & traditional lighting fixture
- ELV system: Earthing & Lightning, CCTV, Access Control, Telephone & data, Fire Alarm, PA. Integrated solution for ELV system.

Process Piping System:

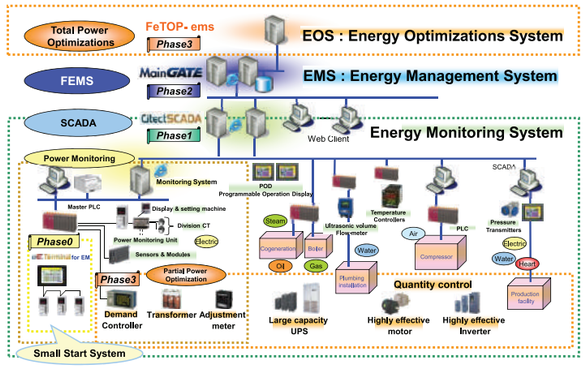
- Utilities Piping System: Steam, Condensate, Vaporized CO2, Compressed Air, Raw Water, RO Treated Water, Chilled Water, Pipe support…
- Hygienic Piping System.

HVAC System:

- Variable Refrigerant Volume (VRV) system.
- Chilled Water system.
- Fresh air, ventilation and exhaust system .
- Cold room unit.
- Building Management System (BMS).

Plumbing & Fire Fighting System:

- Hydrant system Pump House.
- Piping Distribution, Sprinkler system.
- Water drainage and plumbing system.



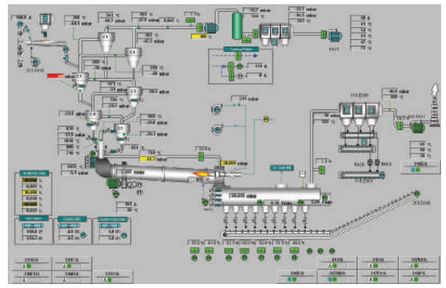
Focus Industries — CEMENT & CONSTRUCTION MATERIAL

SCOPE OF WORK:

- EPC Contractor, included Design, Procurement & Construction Management for whole Cement Plant.
- Engineering: Complete Project Management, Process Engineering management, Design complete Electrical system.
- Procurement: Mechanical Process equipment, Electrical, specific construction works & Auxiliary equipment.
- Construction Management.

SCOPE OF SUPPLY:

- High, Medium & Low voltage stations.
- Starters for Medium Voltage Motors.
- LV Switchgear - MDB & MCC.
- Motor & Drives.
- Diesel generator.



- Plant control system consists of: Distributed Control System – DCS.
- Optimum control system, design system.
- Quality Control System, Scanner for Kiln.
- Information management system.
- Stand-by power distribution system and accessories.

- Gas analyzer system.
- Instrumentation: Temperature, Pressure, Level, Switch…
- Industrial television system: CCTV, High Temperature Camera.
- Fire Alarm, Telephone & Data system.
- Aggregate proportions supervision system, X-Ray machine.

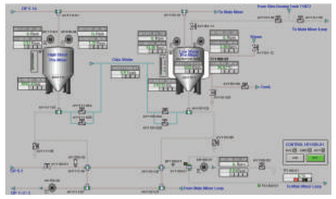
Focus Industries — CHEMICAL & FERTILIZER

SCOPE OF WORK:

- Detailed Engineering, Procurement, Cost & Schedule Control, Construction Management.
- Engineering & Commissioning for Plant Control System.

SCOPE OF SUPPLY:

- Ex equipment, Process Instrumentation and CEMS (Continuous Emission Management System)
- Automation (DCS + Batch), MCC, Cable & Weighing Package.
- Complete Electrical System: Main power station, LV Switchgear - MDB & MCC, Lighting, Earthing & Lightning, ELV system (CCTV, FA, Tel & Data).
- Diesel generator, stand-by power distribution system and accessories.
- Motor & Drives.
- Plumbing & Fire Fighting System: Hydrant system Pump House, Piping Distribution, Sprinkler system, Water drainage and plumbing system.



Focus Industries — INFRASTRUCTURE & FACILITY

SCOPE OF WORK:

- Detailed Engineering, Procurement, Cost & Schedule Control, Construction Management.

SCOPE OF SUPPLY:

Complete Electrical System:

- Main power station, LV Switchgear - MDB & MCC.
- Lighting, Earthing & Lightning, ELV system (CCTV, FA, Tel & Data).
- Motor & Drives.

Automation:

- PLC-SCADA, DCS, Control panel.

Instrumentation:

- Level, Temperature, Pressure, Analyzer.

FMCS

- Facility Monitoring Control System

Focus Industries — OIL & GAS, POWER

SCOPE OF WORK:

- Detailed design & Document control, Scheduling, Procurement & Expediting, Instruction for installation, commissioning onshore & offshore services with both ANSI/NEMA and IEC standards.

SCOPE OF SUPPLY:

- Transformer: Liquid filled Transformer, Dry Transformer.
- MV switchgear, LV switchgear, Small distribution panel (DBS).
- Generator Control & Synchronizing Panel.
- Motor control center & intelligent motor control center (MCC & IMCC).
- Busway System.
- Motor and Drives.
- Neutral grounding Resistor (NGR).
- Process instrument and gas analyzer equipment.
- PLC, DCS.
- ICSS – Integrated control and Safety System.
- Multiphase Flow Meters, piping spool skid assembly and supply complete system.
- Sand monitoring systems.

Focus Industries — SOLAR & RENEWABLE ENERGY

SCOPE OF WORK:

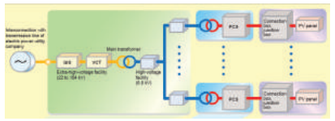
Detailed Engineering, Procurement, Cost & Schedule Control, Construction Management.

SCOPE OF SUPPLY:

Rooftop Solar application: EPC for complete system.

Large scale Solar farm: in cooperation with Engineering Partner, we offer full solution for Solar projects as EPC Contractor.

- Engineering with optimum PV panel circuit, single line diagram from PV panel to Grid, optimum PV layout & foundation solution.
- Procurement material for whole project: PV module system, PCS station, 110kV substation & grid connection
- Construction & project management.
- Commissioning & pre-operation.



FUJI ELECTRIC CORPORATE HISTORY

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

1920–1980

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.

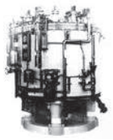

Company emblem, FS mark

1924
- **Began manufacturing electrical machinery**

1925
- **Began operation of the Kawasaki Factory**
- **Began transformer production**

1927
- **Began electric fan production**

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



1933
- **Began expansion circuit breaker production**

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

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

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

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

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

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

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**

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

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

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

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**
- **Began operation of the Otawara Factory**

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***

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

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**

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

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**

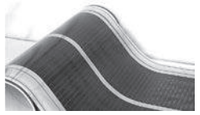
1999
- **New mini-UPS “J-Series” launched**

2000

2002
- **Introduced Company symbol mark**

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

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).

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)

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
- **Changed company name to Fuji Electric Co., Ltd.**

- **Established GE Fuji Meter Co., Ltd.**
  (joint venture with General Electric)

- **Launched sales of medium-voltage inverter with water-cooling system “FRENIC4800VM5”**

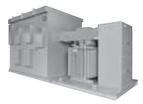
2012
- **Introduced brand statement**

Innovating Energy Technology

- **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**



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)**

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


FRENIC-VG


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

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**

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