Build up Trust Through

Human Resources, Technology, and Quality.
Utilizing the technologies we have developed as technical partner of Mitsubishi Electric Corporation combined with our own advanced comprehensive capabilities, we offer complete manufacturing support from design and development to commercialization.

**Development and design to support Mitsubishi Electric Group**

- Mechatronics systems
- Information and telecommunications systems
- Home appliances

**Design solutions**

- Electronic and electrical design
- EMC and safety certification
- Mechanical and structural design

**e-Solutions & services**

- Manuals and operation guides
- Tablet terminal solutions
- Digital solutions

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**Product and system businesses**

Through design development in various fields, our goal is to create products born from unique ideas based on our comprehensive advanced technical capabilities. We are then able to sell such products through in-house brands.

**Industrial and mechatronics systems and FA equipment and systems**

- Electrical motor control panels
- Mechatronics systems
- FA-related equipment

**Visual, air conditioning, and heating/cooling equipment**

- Touch panel monitors
- Reception guide system "ComConCall"
- Electronic refrigerators
- Air conditioners for elevators
We Never Stop Evolving.

Mitsubishi Electric Engineering, a company engaged in development, design, and other related activities for products and systems manufactured by Mitsubishi Electric Corporation, has developed continuously in a wide range of technological fields from home electronics to space technology. Now we offer engineering services such as development and design as well as product sales of our originally developed products used in various fields, including industrial, factory automation, and air conditioning/heating applications, to a wider range of customers and are highly evaluated by our many customers.

As we continue to revise how we conduct operations, our business environment is poised to undergo drastic changes. Through constant reform and evolution based on internal review, it is important that we continuously search for new value. Our aim is to continue to evolve while meeting the various needs of our customers by thoroughly developing and utilizing the comprehensive technical capabilities consisting of a wide range of technologies possessed by our more than 5,000 engineers working throughout the nation. In so doing, we will adhere to our motto in design and development: “Build up trust through human resources, technology, and quality.”

Hideaki Nagatomo, President

Technologies we have developed as "technical partner" of Mitsubishi Electric Corporation

Our business fields
- Space  
- Information and telecommunications  
- Power  
- Public utilities  
- Industrial technologies  
- Buildings  
- Traffic  
- FA  
- Mechatronics  
- Automobiles  
- Living environment

Core technologies serving as our business foundations
- Electronic circuits  
- Mechanical design  
- Mechatronics  
- Networks and telecommunications  
- Analog circuits  
- CAE analysis  
- Power electronics  
- Software  
- Printed circuit boards  
- Thermo-fluid design  
- Panel production design  
- Contents and data utilization  
- LSI and FPGA  
- EMC and safety certification  
- High frequency design  
- AI

Our comprehensive capabilities (ALL-MEE)
Through collaboration with businesses throughout Japan, we have brought together our cultivated technologies and expertise to provide high added-value technical services, products, and systems.
Design solutions

To solve development problems of our customers, we offer one-stop services ranging from consultation for development to design, evaluation, and commercialization of a wide variety of products including electronic equipment, optical equipment, and precision equipment. We offer such services by utilizing our own technologies in such fields as electric and electronic design, and mechanical and structural design.

One-stop service

To meet the needs of our customers, we offer total manufacturing support by combining proprietary core technologies.

We provide high-quality design services based on the proven product development capability and experience. We offer high-quality designs by making use of the latest design tools and by utilizing the experience and know-how we have accumulated as an engineering company for a major electronics manufacturer.

Development and manufacture of equipment and systems

We offer reliable system development and manufacturing services. These services are provided to our customers through our products.

Board development

We provide comprehensive board solutions ranging from design to manufacture, component mounting, testing, and evaluation of circuits and printed circuit boards.

LSI design

We provide comprehensive solutions for LSI development(*1) ranging from study of required specifications to proposal, design, verification, synthesis, and hardware support.

Mechanical design

We provide comprehensive solutions related to structural, body, and mechanism design for home information appliances, industrial equipment, and image communications devices.

CAE analysis

We provide solutions utilizing CAE(*2), including analytical specifications study, results evaluation, and design proposals.

EMC and safety certification

We provide one-stop solutions ranging from support to establish EMC(*3) and anti-noise measures to acquisition and maintenance of safety certification.

*1 LSI development: ASIC, FPGA, CPU and peripherals IP, analog LSI, etc.
*2 CAE: Computer Aided Engineering
*3 EMC: Electro-Magnetic Compatibility
As a technical partner providing manufacturing support for Mitsubishi Electric Corporation and the Mitsubishi Electric Group, our focus is on development and design for such aspects as electricity, structure, functions, and production. We provide optimum design and support services related to development and design for products and systems in various fields ranging from household products for ordinary consumers to space development and social infrastructure technologies.

**Development and design to support Mitsubishi Electric Group**

Development and design of artificial satellites, satellite-mounted equipment, satellite communication equipment, optical communication equipment, radio/cable communication equipment, radar equipment, and CCTV monitoring systems

Development and design of power generation plants, substation facilities, power distribution systems, water supply and sewerage facilities, electrical transformers, and breakers

Development and design of monitoring control systems, power control systems, measurement control equipment, and power electronics equipment

Development and design of escalators, elevators, building management systems, and large-scale visual system equipment

Design and development of propulsion control systems, railway vehicle equipment, railway air conditioning systems, and automatic platform gates

Design and development of programmable logic controllers, inverters, servos, robots, electric discharge machines, and laser machines

Development and design of engine electrical components, various equipment for engine control, power control for hybrid cars, car navigation systems, and car audio systems

Development and design of LCD televisions, refrigerators, ventilating fans, air blowers, electric water heaters, freezing/refrigerating equipment, room air conditioners, packaged air conditioners, and photovoltaic systems

Development support, analysis, and evaluation designed to meet the needs of Mitsubishi Electric Corporation’s research laboratories and centers
Industrial and mechatronics systems

In response to the needs of various industries and mechatronics systems including factories, buildings, and plant facilities, we provide optimum solutions beginning with consultation.

**Industrial system solutions**

- **Investigation and analysis**
- **Planning and proposal**
- **Design and manufacture**
- **Start-up and adjustment**
- **Maintenance and servicing**

**Power distribution and power control systems**

We design and produce systems based on high-voltage distribution panels and combination panels and offer solutions for power distribution systems. We also provide various technical calculation services.

- High/low-voltage receiving and distribution panels (conforming to JEM 1425 and 1225)
- Various electrical motor control panels, control panels for generator-related equipment
- Power distribution control systems, motor control systems

**Conveyance driving systems**

We provide systems consisting of combinations of control devices such as thyristors and inverters and peripheral devices such as motors and brakes used in steel and waste incineration plants and at seaports.

- Electric parts for cranes
- Coil-type motors and brakes for cranes
- Drive control systems (rotary presses, cable railways, etc.)

**Monitoring control systems**

To make factory operation (energy and production information) transparent, we offer optimal systems meeting customers’ needs through factory investigation and analysis.

- Energy monitoring systems
- Energy saving analysis support systems
- Manufacturing execution systems (MES*)
- Instrumentation control systems
- Energy indication systems
- Power saving systems

*MES: Manufacturing Execution System

**Mechatronics systems**

We provide proposals of dedicated devices and production lines and test and inspection systems that contribute to the enhancement of customers’ productivity and product quality.

- Automation of assembly and conveyance
- Construction of robot application systems
- Construction of various test equipment
- Automation of visual inspections and auditory inspections
- Facilities maintenance services
e-Solutions & services

We provide one-stop services for the production, management, and utilization of information content necessary for any process within operations of the customer.

**Digital solutions**

**Design solutions**
We produce appealing CG and movies for presentation of product functions, and plan and create promotional materials such as catalogs, websites, and promotional tools that use tablet devices. We also offer promotional solutions for cross-media marketing of customers’ products using these items.

**Production of promotional materials using CAD data**
We plan and create appealing 3D-CG animations from CAD and other design data, as well as promotional materials for expositions, VR content, educational tools, maintenance support tools, and development production support tools.

**Video content planning/production**
We provide total solutions from planning and production of visual content to development of application systems.

**Web system solutions**
We design web systems, including drawing management systems and sales management systems to suit customers’ needs. We also plan and design websites.

**CAD solutions**
We offer CAD solution services that meet customer needs, including consultation on introduction of an optimum CAD system to streamline product development and design; establishment of such system; education for system operation; and development of data management systems to utilize CAD data effectively.

**Tablet terminal solutions**
We offer systems and content utilizing tablet terminals such as format input/shipment inspection systems and marketing tools for inspection and maintenance sites.

**Document solutions**
We produce appealing CG and movies for presentation of product functions, and plan and create promotional materials such as catalogs, websites, and promotional tools that use tablet devices. We also offer promotional solutions for cross-media marketing of customers’ products using these items.

**Document management solutions**
We support projects at stages ranging from the analysis of the present status of document management and the development of scheme to the configuration of system and the establishment of maintenance and management systems. Also, we offer document management systems that meet customers’ demands, such as conversion of paper documents into electronic data.

**Manuals and operation guides creation solutions**
We cooperate with development and design divisions to provide one-stop services comprising planning of manuals and operation guides written and laid out in an easily understandable way; technical writing; technical illustration; translation; printing, and production of electronic manuals using websites and tablet devices.

**On-demand printing services**
We deliver one-to-one catalogs and operation guides on demand in any quantity whenever needed. We offer on-demand printing and bookbinding services at our major business bases located nationwide.
Air conditioning and heating/cooling equipment

We provide products, including electronic refrigerators for hotels and hospitals, created through the mobilization of a comprehensive range of technologies including freezing, refrigeration, air-conditioning, and cooling and heating control technologies.

Electronic refrigerators

- Petter-effect electronic refrigerators

Research and test equipment

- Compact low-temperature incubators
- Cool incubators

Air conditioning and heating/cooling equipment

- Air conditioners for elevators
- Cooling units for electric discharge machines
- Air conditioning servicing tools

Audio equipment

We provide acoustic equipment in response to the needs of the market, such as high-directionality speakers for warnings on escalators and platforms.

Supersonic wave sound system “Kokodake”

Compact ultra-directional Speaker system

Applied technology products

High-frequency power supplies

Our 6.78 MHz / 50 W power supplies can be used for the development of wireless power transmission equipment equipped with high-efficiency Class E inverters.

Audio/vibration analysis system (VisibleWave)

We offer visualization processing using wavelet transformation capable of making invisible sounds and vibrations visible.

Health

Our servo control technology is utilized significantly in rehabilitation equipment.
**Product and system businesses**

### FA equipment and systems

We offer wire-saving and labor-saving devices, renewal tools, and peripheral devices for servo systems that supplement FA equipment of Mitsubishi Electric Corporation and enhance customer satisfaction.

**Wire-saving and labor-saving equipment**

- Labor-saving goods for programmable logic controllers
- Labor-saving goods for servo systems

**Renewal tools**

- Renewal tools for programmable logic controllers
- Renewal tools for servo systems

**FA-related equipment**

- RFID* interface modules
- FL-net units

*RFID: Radio Frequency IDentification

### Visual and monitoring security equipment

We provide a wide variety of products designed to meet a wide range of needs from office reception systems to on-board touch panel monitors for surveillance systems and equipment panels to river and intersection monitoring equipment.

**Visual and monitoring security equipment**

- Reception guide system "ComConCall"
- Touch panel monitors
- Traffic Accident Auto Memory System "TAAMS"
- Deep learning-based water gauge "Field Edge"
Organization (As of April 1, 2019)

Subsidiaries

Diamond Personnel Co. Ltd.

Guangzhou Hailing Mechanical & Electric Technology Co., Ltd
Established in 2003. Engaged mainly in aiding our company and business sites of the Mitsubishi Electric Group in China in development and design.
CSR concepts

Our CSR activities are based on the corporate mission and seven guiding principles of the Mitsubishi Electric Group.

Corporate mission of the Mitsubishi Electric Group

The Mitsubishi Electric Group will continually improve its technologies and services by applying creativity to all aspects of its business. By doing so, we enhance the quality of life in our society.

Seven Guiding Principles of the Mitsubishi Electric Group

| 1 Trust | Establish relationships with society, customers, shareholders, employees, and business partners based on strong mutual trust and respect. |
| 2 Quality | Provide the best products and services with unsurpassed quality. |
| 3 Technology | Pioneer new markets by promoting research and development, and fostering technological innovation. |
| 4 Citizenship | As a global player, contribute to the development of communities and society as a whole. |
| 5 Ethics and Compliance | In all endeavors, conduct ourselves in compliance with applicable laws and high ethical standards. |
| 6 Environment | Respect nature, and strive to protect and improve the global environment. |
| 7 Growth | Assure fair earnings to build a foundation for future growth. |
This corporation information contains our domestic businesses only.

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