

COMPANY GUIDE

DHF



DAI-ICHI HIGH FREQUENCY CO., LTD.

“Aiming to make DHF a truly respected and essential company.”

Message from the President

From its founding in 1950, Dai-ichi High Frequency Co., Ltd. (DHF), specializing in high frequency induction heat treatment, has operated on three fundamental principals,

1) Independent Management, 2) Original Technologies, 3) Respect for all Human Beings.
DHF has contributed to society through its unique and advanced products and technology.

Based on its high frequency heating technology, DHF currently creates products in metal forming, surface processing and electro-magnetic wave practical technology and equipment engineering design. They are recognized domestically and internationally as essential technology in the energy sectors of electric power, gas, and petro-chemical, as well as in the various fields of shipbuilding, steel milling, civil engineering, architecture, food, and pharmaceuticals. For on-site and off-site facilities in these fields, DHF supplies innovative, advanced products and technologies and steel in piping reinforcement processing, to shorten construction and/or maintenance periods and reduce costs by raising safety, reliability and durability.

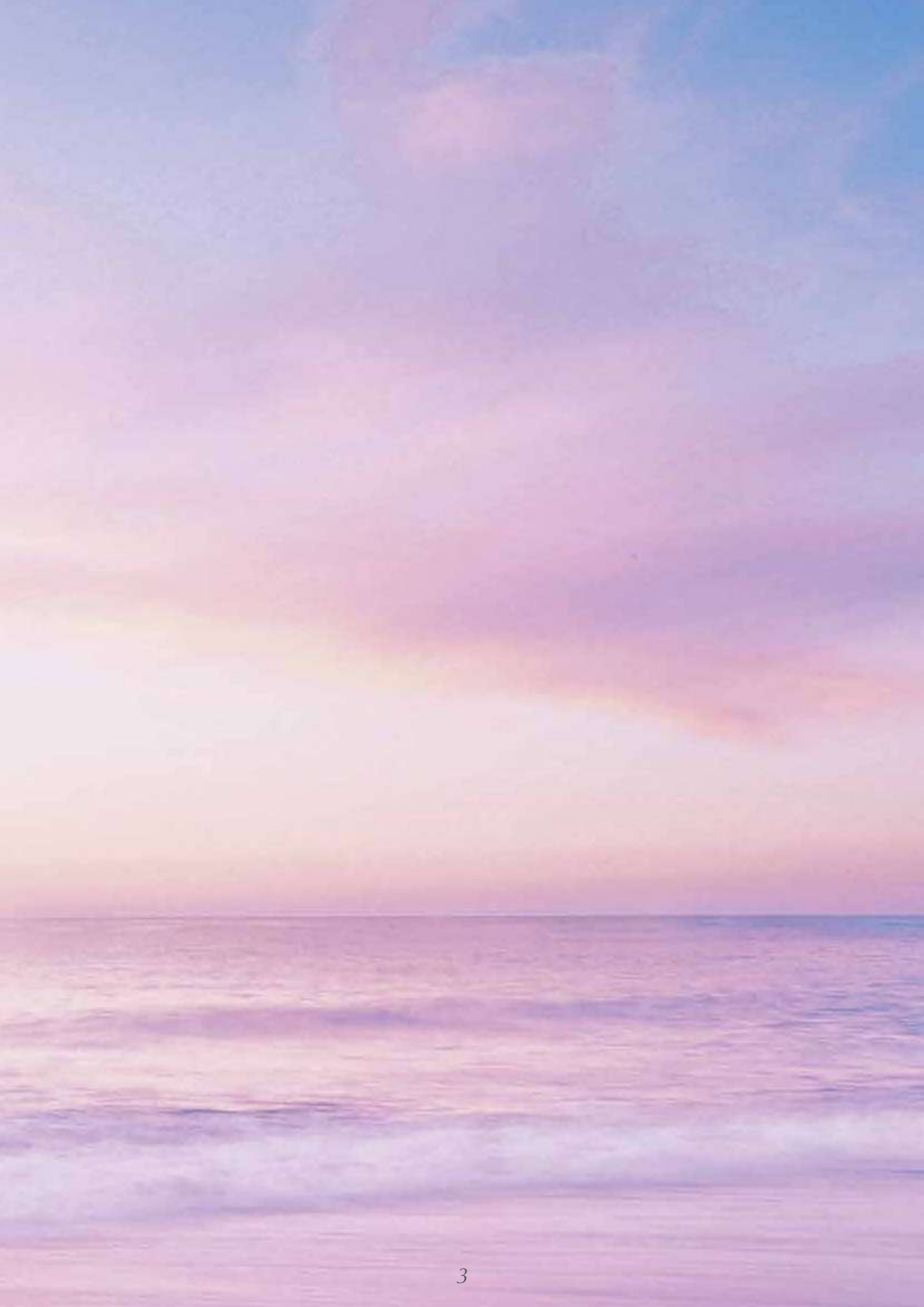
Our products and technologies are highly evaluated globally, in addition to exports, DHF furnishes rental services of production equipment and licenses technology to companies worldwide.

In 2011 we established a subsidiary in China to fortify our global structure of production and services, to support our customers for their international business expansion.

With the start of our 2017 three-year midterm business Plan, we are committed to Our “DNA” (DHF New Architecture) management vision strategy. We promise customers to grow and prosper together, by providing the total solution of engineering to execution to maintenance, through our strength of unique manufacturing.

I would sincerely like to express my deep appreciation for your continued support and guidance to DHF.

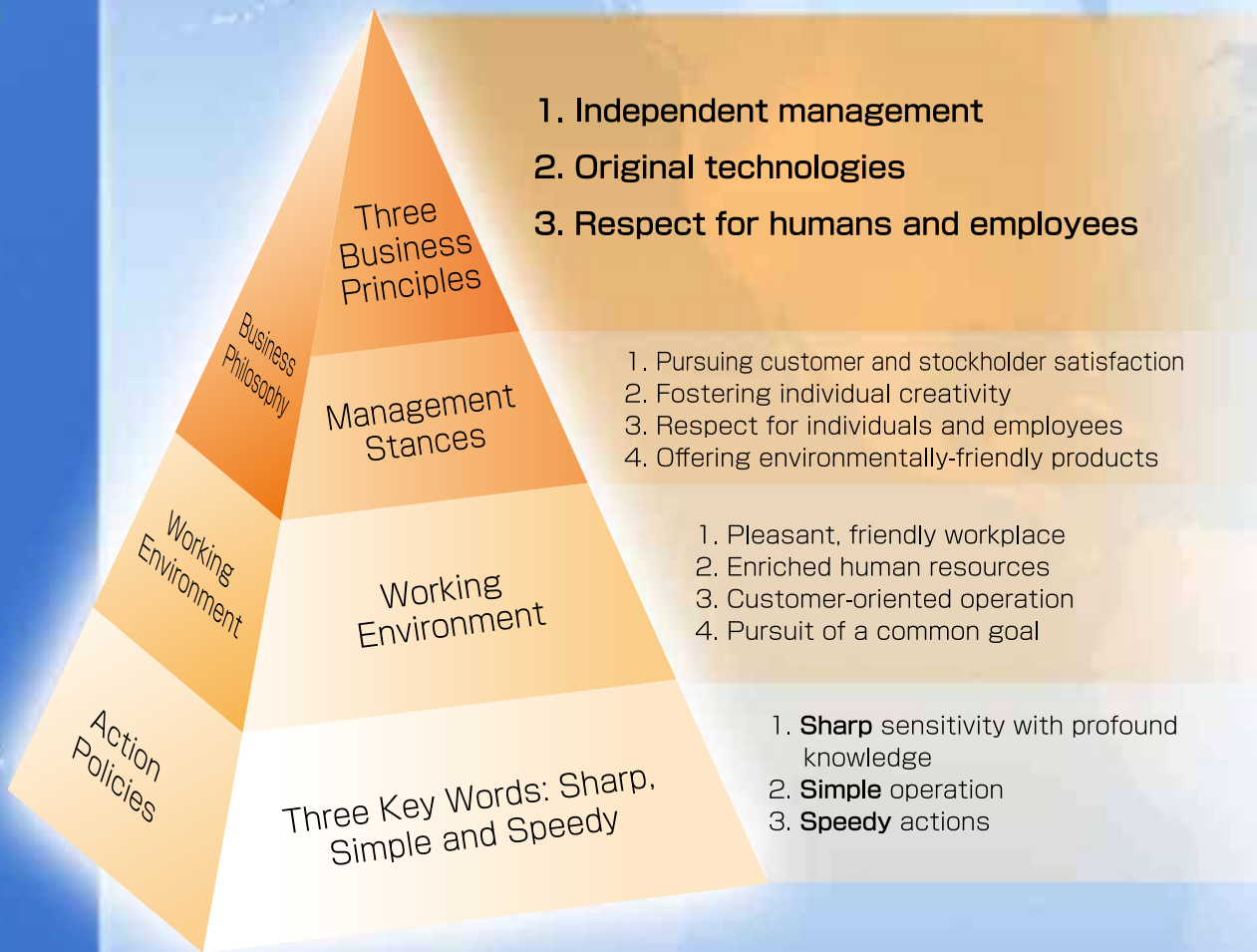
President, *Kotaro Hirayama*





Business Policies

At DHF, management and employees are working together toward a common goal—continued growth—under three fundamental business principles. What's more, DHF strives for the complete satisfaction of our customers and stockholders.



Pipe Processing Business

- High-frequency pipe bending
- High-frequency pipe lining
- Piping design

Research and

- New techno
- New produc
- Design and
- Production

Public Work Business

- Manufacture and sale of water-transport lining pipes and shaped steel pipes
- Y-joints (flexible joints)

Steel reinforcement Processing Business

- T-Head construction method bar processing

Edge Technologies

Development

ologies
ts
know-how
technology

Surface Processing Business

- High- and medium-frequency heat treatment
- Roll production
- Grinding
- High-frequency quenching
- Thermal spraying

Equipment Business

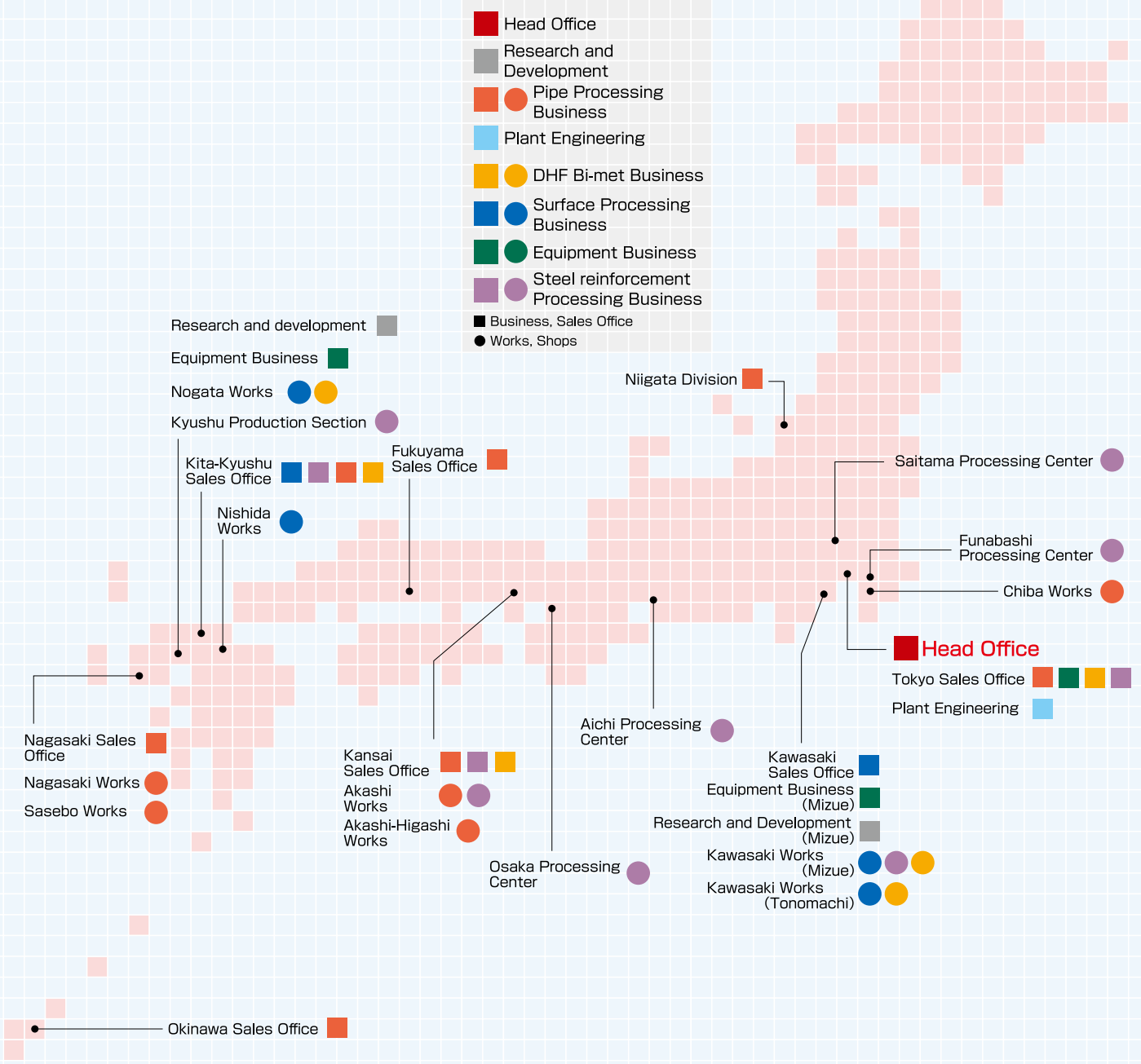
- Manufacture of various products, and related works
- Manufacture and sale of High Frequency Induction Heating Equipment
- Testing, research and development

DHF Bi-met Business

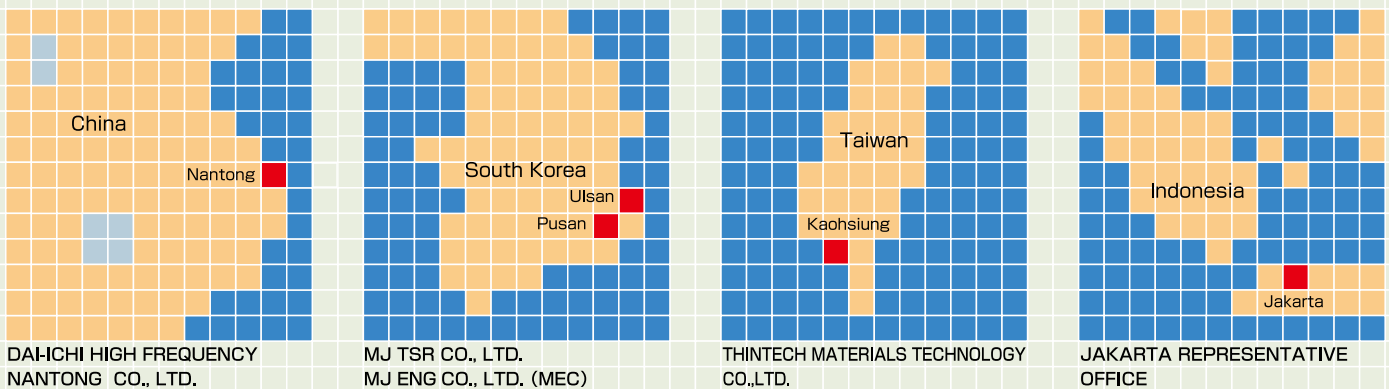
- Bimetallic boiler tube and panel (BT&P)
- Bimetallic steel pipe (BML)
- Bimetallic DB-alloy cylinder (BMC)

DHF Organization

● Domestic Organization Head Office, Business, Sales Office, Works,



● Overseas Affiliates





Head Office



Kawasaki Works (Mizue)



Kawasaki Works (Tonomachi)



Chiba Works



Akashi Works



Kurosaki Works



Nagasaki Works



Sasebo Works



Dai-ichi High Frequency Nantong Co., Ltd. (China)



Nogata Works

DHF Provides Optimal Solutions to Piping Problems with Excellent Technologies

Pipe Processing Business is engaged in the manufacture and sale of a variety of pipes thanks to advanced high-frequency induction heating technologies, including pipe bending, heat branch extrusion, and polyethylene powder lining.

What's more, DHF offers various products and engineering to meet diversified needs of energy plants for electric power, gas and oil; piping for ships, vehicles, water and gas; and construction works.

High-Frequency Bending

High-frequency induction heating for pipe bending, which is the world's first technology, received the Okochi Memorial Production Prize—an authentic scientific prize in Japan. Various bent pipes with excellent mechanical properties and minimum reduction in wall thickness, including small-radius bent pipes, are produced thanks to high-frequency induction heating.

Major Applications

- Electric power: Nuclear power, thermal power, hydraulic power
- Plants: Chemical, gas, petroleum
- Pipelines: Petroleum, gas, electric power, slurry transmission
- Shipbuilding: Inboard piping, LPG/LNG tankers
- Structures: Steel frames, roller coasters, aqueducts, pedestrian bridges, highway structures, artistic structures
- Piping: Building piping systems, water supply and discharge piping, hydrant piping
- Others: Piping for construction equipment

Small-radius pipe bending	Small radius bending with 1DR, equivalent to a long elbow R with minimum wall thickness reduction. Applicable to petroleum refinery piping and inboard piping. Small-radius heavy-wall bending is suitable for high-temperature and—pressure piping in electric power stations and petroleum plants.
Pipeline bending	Bending of gas and petroleum pipelines under tough environmental conditions, with high mechanical properties and stable quality. DHF bends are widely used for pipelines (up to API X80 grade) at home and abroad.
On-site bending	On-site high-frequency bending, using a mobile bending machine. This practice is in widespread use in the Southeast Asia, Middle East and South America for efficient piping work.
Shaped steel bending, large-diameter pipe bending	High-frequency bending, with less distortion and strain of shaped steels (H-steel, channel and oval steel), utilized for aqueducts, monuments and roof beams with large radii (up to 150 m).

High-Frequency Lining

High-frequency lining, using polyethylene and epoxy, is used in various industries to protect steel pipes (inner and outer surfaces) from corrosion.

Major Applications

- Power: Nuclear power, thermal power, hydraulic power
- Plants: Chemical, gas, petroleum, water treatment
- Pipelines: Petroleum, gas, electric power
- Shipbuilding: Inboard piping
- Piping: Building piping, water supply/discharge piping, hydrant piping, service water/sewerage
- Semiconductors: Pure-water drain piping

Polyethylene lining	Anti-corrosion lining, using DHF-developed polyethylene powder, has been adopted for over 40 years to piping for seawater, service water, sewage, and disposal water in various sectors, including electric power, petroleum, gas, chemicals, water, structures, and ships.
FBE coating, 3-layer PE	Anti-corrosion outer surface lining/coating conforming to overseas pipeline standards is applied to bends. Also, FBE (Fusion Bonded-Epoxy) coating and 3-layer PE (with outermost polyethylene layer) are available.

Piping design

3D-CAD is utilized for efficient piping design, materials procurement, and shop manufacturing.

Major Applications

- Energy: Nuclear power, thermal power, LNG, LPG
- Plants: Chemical, gas, petroleum, steelmaking, foods
- Pipelines: Petroleum, gas, electric power, slurry transmission
- Shipbuilding: Inboard piping
- Building: Draining, air conditioning, emissions, water supply, hydrants
- Environmentally friendly plants

Weldless piping	Weldless piping, assisted by 3D-CAD, enables small-radius bending and branch extrusion, and reduces the number of welds for cost saving, shortens job schedule, and improves quality.
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Polyethylene pipe lining (inside and out)



Heavy-wall bends for power-generation plant



H-steel for bridge pier



Coated bends



On-site bending (Middle East)



Sea bridge using high-frequency bending technology



Polyethylene lining pipe (inside)



FBE-coated bends



3D-CAD

Best Solutions to Wear and Corrosion Problems for Customer's Maximum Satisfaction.

DHF provides best solutions to wear and corrosion problems through its advanced and comprehensive surface processing technologies as well as IH(Induction Heating) technology and affluent experiences. The proven surface processing technologies ensure high and consistent quality as well as excellent performance of not only large-sized, heavy-duty, but also mass-produced products to meet diversified customer's needs.

Rolls

DHF's original and unique IH technologies can make it possible to produce rolls having not only deep and uniform hardened working-surface but also a high peeling-off resistance and very low distortion. And by employing a total production management system, which covers from material procurement, manufacturing, machining, to polishing process, DHF can supply rolls with high precision, excellent performance, and long service life.

Major Applications

- **Iron & Steel:** CC(Continuous Casting), thick plates, hot and cold plate&sheet rolling, Rod and wire rolling
- **Nonferrous:** Hot and cold plate&sheet rolling
- **Steel plates:** Shearing and slitting
- **Other:** Paper, chemicals, fibers, foods, and printing

Cylindrical rolls (DHP rolls)

High quality rolls, of which bodies consist of cylindrical shells made by bending plates in round and welding end faces to join. DHF's original and proprietary welding technique can ensure non-pinhole and uniform hardness over the entire shell surface area including welding joints.

Calender rolls

High-precision rolls with a fine-tuned surface properties, which DHF can make with high machining and surface processing technologies.

Thermal Spraying

Thermal sprayings, such as, self-fluxing alloy S&F(Spraying and Fusing), cermet, and ceramic spraying are popular surface coating methods to improve its wear and corrosion resistance to achieve long service life. Especially DHF developed a unique self-fluxing alloy fusing-process by employing IH technology to form high, uniform, and consistent quality coatings.

Major Applications

- **Environment:** Boiler tubes and furnace-wall panels of incineration
- **Iron & Steel:** Sink rolls, process rolls

Self-fluxing alloy S&F

Nickel- or Cobalt-base self-fluxing alloys are usually used to form wear and corrosion resistance coatings on the surface of rolls and various parts. With the IH technology at fusing process which follows spraying process, high, uniform and consistent quality coating can be produced.

Cermet spraying

Cermet coatings sprayed by HVOF(High Velocity Oxy-Fuel) system have been getting popular due to high density and bonding strength. WC-Co system cermet is more popular and favorably applied to rolls than Cr plating coatings.

Ceramic spraying

Ceramic coatings sprayed by plasma flame spray system, which have high wear, corrosion, and heat resistance, as well as high dielectric strength, heat-insulation, and non magnetism. Ceramic materials are chosen in accordance with required performances of applications.

Heat Treatment

DHF's heat treatment can control hardness and its depth to the most suitable values to each customer's application, and is applied to various components and parts of equipments used in a wide range of industries, such as railway, mining, steel, cement, civil engineer, transportation, machine tool, and so on.

On-site quenching

Big components, which are too large and heavy to transport, can be quenched with DHF's IH device and power supply, which are brought in and setup on site.

Bimetal T&P's(Tubes and Pipes) and Cylinders

Cylindrical steel products coated with self-fluxing alloys lining on its inner surface to add wear and corrosion resistance through DHF's unique IH fusing process, which also realizes a high bonding strength between lining and base metal.

Bimetal T&P's (DML)

Bimetal tubes and pipes with high wear and corrosion resistance developed and designed for applying to transportation of corrosive fluids, or abrasive or hard solid powders with pneumatic system in the plants. Both straight and bent ones are available.

Bimetal Cylinders

Especially developed and designed for applying to extrusion and injection molding machines, which process specialty plastics, such as engineering plastics, GFRPs(Glass Fiber Reinforced Plastics), and so on which require high wear and corrosion resistance cylinders.



Calender rolls ($\phi 300 \times 1600 \ell$)



Cylindrical roll



Tension leveler work rolls



Large roll quenching



Ceramic spraying (plasma)



Cermet spraying (HVOF)



Large gear on-site quenching



IH fusing SF alloy coatings



Bimetal boiler tubes



Cam quenching



Bimetal tubes and pipes



Bimetal cylinders (DBC)

DHF offers a variety of products and maintenance services based on advanced heat treatment, induction heating, and years of experience.

Products

Superheated steam generators	Generate superheated steam from saturated steam at 100°C easily and efficiently, using the existing processing chamber.
Induction heating equipment	Heat treatment processing for mechanical parts, non-oxidizing heating, steel pipes with low distortion; and plastic forming, using accumulated know-how.
Induction heating power source	Mobile compact type capable of being installed in confined space in laboratories and job sites.
Plant maintenance equipment	Induction bolt heater, painting film peeling, shrink fitting and removal of shrink fitting.

Plant Maintenance

Induction bolt heater	Tightens and loosens bolts of valves, flanges, pressure vessels, turbines, hydraulic turbines, steel rolling mills, etc by induction heating.
Tube Removal	Tube of boilers, heat exchangers and condensers is heated by using induction heating method. Thermal expansion of the tube is restricted to the tube hole I.D. As the result, the tube shrinks when cooled and it can be removed easily by hand.
Lining peeling	Peels anti-corrosion lining off tank, pipe etc.
Shrink fitting/ thermal withdrawal	Allows shrink fitting and removal of shrink fitting, couplers, gears, propeller shafts by induction heating.
Field heating	Allows field heating and annealing for stress relieving at welds, using a mobile induction heater.

Rental Steam Heaters and Induction Heaters

Rental service of steam super heaters, experimental induction heaters are available for heating and experiment at customers.

Products



Superheated steam generator



Steel pipe quenching device



Full-auto cam quenching device



Induction heater power source



Induction pipe bending machine (48 inches)

Plant Maintenance



Induction bolt heater



Boiler tube removal
(Induction heating tube shrinker)



Induction Heating Stress Improvement (IHSI)



Shrink fitting and thermal withdrawal



Painting film peeling


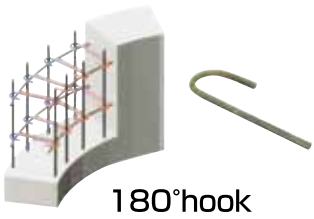
The Use of T-Head const. method bars Simplifies the Assembly of Steel Reinforcements.

With T-head const. method bars, steel reinforcements can be assembled, easily and efficiently, reducing job schedule and costs.

Efficient Assembling of Steel Reinforcements, Using T-Head const. method bars

Steel reinforcements can be assembled efficiently, increasing productivity and shortening job schedule at low costs.

Conventional Assembling of Steel Reinforcements

180°hook

Conventional assembling of steel reinforcements by using 180° hooks is cumbersome. Using T-head bars, job schedule and costs can be reduced, while increasing concrete placing efficiency.



Efficient Assembling of Steel Reinforcements Using T-Head const. method bars




T-Head Const. Method Bar

Steel reinforcements can be assembled efficiently by using T-head const. method bars, shortening job schedule and cutting costs.



Reinforcement for side wall



Fixture of precast stair reinforcement



Fixture of beam reinforcement



Reinforcement for tunnel covering



“Land Technological Development Award” from Ministry of Land, Infrastructure, Transport and Tourism, Japan



“Structural Performance Certificate” from the General Building Research Corporation of Japan



“Construction Technology Certificate” from the Public Works Research Center, Japan

A Variety of DHF Products in Widespread Use in Public Works

A family of DHF products has been widely used in service water piping and water-transport pipelines, receiving a high reputation for high corrosion resistance and reliability.

Public Works

Water-transport Lining pipes	Polyethylene Lining of straight and shaped pipes, and epoxy lining of stainless steel pipes
Aqueducts	Aqueducts for service water, sewage, agricultural water, and industrial water, featuring low-cost, induction-bent arch bridge.
Vacuum double pipe	Vacuum heat-retention double pipe, made of high-strength polyethylene, does not need flexible tubes at both ends.
Y-joints	Simple structure with water tightness and high strength. Easy to install at low cost. Y-joints are available in various sizes.
Inner bands	Stainless reinforcing pipes with high corrosion resistance are easy to be installed at low costs



Vacuum double piping



Y-joint



Aqueduct



Inner bands

A wide range of DHF technologies include: plastic forming of steel pipes and steel reinforcement; surface processing, anti-corrosion treatment and wear-resistant treatment, such as resin lining, thermal spraying and heat treatment; new-material development (metal, nonmetal and polymer); and electromagnetic wave technology.

DHF technologies are contributing to various industrial sectors, including electronics, chemicals, electric power, steelmaking, carmaking and construction.

■ Induction Heating Technology

DHF developed hot plastic shaping expertise based on high-frequency induction heating for pipe bending. This technology is the world's first, winning the Okochi Memorial Prize, an authentic technological award in Japan.

Induction heating expertise allows for local thickening of a pipe.



Pipe wall thickening

■ Surface Processing Technology

DHF developed high-frequency quenching expertise of railroad tracks, which is the world's first, and won the Okochi Memorial Prize, an authentic technological award in Japan. Also, the company developed original resin powder lining expertise for pipe protection against corrosion.

At present, the company offers a variety of advanced resin lining, coating and painting, as well as quenching, thermal spraying and carbonizing.



Thermal spraying

■ Electromagnetic Wave Technology

DHF developed electromagnetic wave technology, including microwave and ultrasonic for heat treatment, featuring excellent electric control of electromagnetic wave. What's more, design and manufacture of the heating inductor are excellent.



Microwave treatment equipment

■ Proven Design and Engineering

Most of all DHF production facilities have been originally developed based on advanced technologies and a wealth of experience. 3D-CAD helps streamline design.



Mobile bending machine

Technological Innovation

Major Testing and Analyzing Equipment

1 Metallic materials

Tensile testers, 500 kN and 1000 kN
Charpy impact testers
Scanning microscopes
Metal microscopes
Wear testers
Thermal impact testers
Hardness meters

2 Resin materials

Measuring apparatus and testers
Gas chromatographic analyzers
Plasma process apparatus
RF induction heating devices
Salt spray testers
Thermostatic ovens and driers
Environment control devices

3 Electromagnetic wave

Induction heating devices for pipe wall thickening
Pipe benders for induction heating testing
General-purpose induction heaters
Thermography
Microwave heaters
Decompression-type microwave heaters
Ultrasonic oscillators
Superheated steam generators

4 Miscellaneous

High vacuum heaters
Thermal spaying devices (plasma, HVOF, HVOF, arc, flame)
Decompression thermal spraying devices
Room-temperature thermal spraying devices
Plasma surfacing devices
Presses
BOTDR (optical fiber meter) 3D-CAD

Joint Researches

- Elbowless (Nippon Steel)
- Thickened column (Daiwa House)
- T-head const. method bar (Shimizu Corporation)
- Thermal spraying (steelmaking companies)
- VOC absorption/desorption (Research institute)
- Ultrasonic thickness measurement of laminated film (Nichizo Tech)
- Auto lining machine for thermal-contraction tube (JFE, Nitto Denko Corporation)
- Ultrasonic percutaneous absorption of medicine (universities)
- Others



Auto lining device for thermal-contraction tube

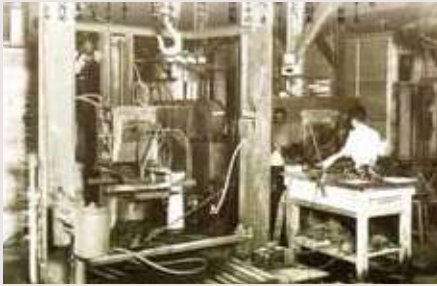
Achievements of Research and Development

- High-frequency quenching (1950)
- Development of resin lining for steel pipe (1961)
- Development of quenching for railroad tracks (Okochi Memorial Prize, 1962)
- Shaping, machining and surface finishing of various rolls (1963)
- Development of pipe bending by high-frequency induction heating (Okochi Memorial Prize, 1971)
- Development of high-frequency stress improvement expertise
- High-frequency induction heating equipment (inverter) (1983)
- Development of inner metal lining of steel pipe (1987)
- Development of metal thermal spraying (1989)
- Development of tightening and loosening of large bolts by high-frequency heating (1994)
- Development of local thickening of steel pipe by high-frequency induction heating and its equipment (1994)
- Special heat treatment of small-diameter bar by high-frequency induction heating and its equipment (1998)
- Development of steel reinforcement end machining and its equipment (1999)
- Development of superheated steam generator by induction heating (2002)
- Development of lining for boiler tubes through metal thermal spraying and induction heating (2004)
- Development of optical fiber monitoring system (2009)



Okochi Memorial Technology Prize
Okochi Memorial Production Prize

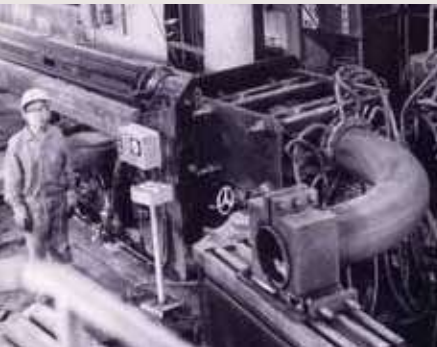
History of the Company



Interior of works at the founding of the company



Quenching of railroad track (1954)



Bender (1966)



Straight pipe lining (1971)

1950~

- 1950 ·Starts general and high-frequency heat treatment for mechanical parts.
- 1953 ·Starts high-frequency quenching of railroad tracks.

1960~

- 1960 ·Starts machining of rolls.
- 1961 ·Starts resin lining for steel pipes.
- 1962 ·Receives the Okochi Memorial Technological Award (for high-frequency heat treatment of railroad tracks).
 - Starts bending of steel pipes by high-frequency induction heating.
 - Starts high-frequency welding of railroad tracks.
- 1966 ·Starts high-frequency welding of steel pipes and steel materials.
- 1968 ·Starts quenching of railroad track ends.
- 1969 ·Starts bending and quenching of bearing races.

1970~

- 1971 ·Receives the Okochi Memorial Production Award (for pipe bending by high-frequency induction heating).
- 1976 ·Starts production of bent pipes and resin lining pipes in Brazil.
- 1977 ·Receives the certificate from Nippon Kaiji Kyokai for bending of pressure piping by high-frequency induction heating.
 - Starts stress improvement by high-frequency induction heating for nuclear power plant (IHSI).
- 1978 ·Receives the certificate from Ministry of Land, Infrastructure Transport and Tourism, Japan for painting and piping for construction.

1980~

- 1981 ·Installs high-frequency small-radius bending machine for large-diameter heavy-wall pipes (HPB-30).
- 1983 ·JIS mark indication was granted for high-frequency quenching and tempering of steel pipes.
- 1985 ·Sets up Piping Engineering section.
 - Sets up Equipment Engineering section.
- 1987 ·Starts on-site bending abroad.
- 1988 ·Starts polyethylene lining of super-large diameter pipes (up to 4000 mm in diameter)
- 1989 ·Starts metal thermal spraying.
 - Starts heat treatment at Akashi Works

1990~

- 1990 •Establishes MJ ENG CO., LTD. (MEC),
a joint venture with Korean Company.
- Completes SIT inverter manufacturing room at Nogata Works.
- 1992 •Starts shaping by large-diameter heavy-wall bending machine
(up to 1200 mm in diameter).
- 1993 •Completes prefabrication shop at Chiba Works.
- 1994 •Starts inner polyethylene powder lining for tanks.
- Introduces CAD for piping design.
- Develops thermal spraying for boiler tubes.
- 1996 •Installs two cementation furnaces at Nogata Works.
- 1998 •Starts sale of hard type PEL (new lining product).
- Installs medium-sized grinding machine at Kawasaki Works
- 1999 •Develops T-head const. method bar (steel reinforcement fixture)

2000~

- 2001 •Receives the Achievement Award from Japanese Society of
Steel Construction for steel structures using wall-thickened
steel columns and one-side bolts.
- 2002 •Receives the Land Technological Development Award from
Ministry of Land, Infrastructure, Transport and Tourism,
Japan for steel reinforcement end fixture (assembly method
using T-head const. method bars).
- 2004 •Establishes Nano Therapy Laboratory (joint venture)
- 2007 •Completes an annex to Nogata Works.
- 2008 •Completes Saitama processing center factory.
- Completes Aichi processing center factory.
- 2009 •Completes Second Nogata Works.

2010~

- 2010 •Completes Kawasaki Works. (Mizue)
- 2011 •Establishes Dai-ichi High Frequency Nantong Co., Ltd. (China)
- Completes Wakamatsu processing center factory.
- 2013 •Starts processing by ZET12 model bending machine.
- Completes administration office in Chiba Works.
- 2016 •Completes administration office in Nogata.
- Completes representative office in Jakarta.
- Completes Funabashi processing center factory.



Greeting at the completion of MEC Works



Completion of prefabrication shop at Chiba Works (1993)



Completion of Kawasaki Works (Mizue) (2010)



Dai-ichi High Frequency Nantong Co., Ltd. (China) (2011)



Completes administration office in Chiba Works (2013)

Company Profile

Company name: Dai-ichi High Frequency Co., Ltd.

Founding: July 1950

Capital: ¥607,754,600

President: Masatoshi Sato

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E-mail: honsha@dhf.co.jp

Web site: <http://www.dhf.co.jp>

Business line:

- Pipe Processing Business
 - High-frequency pipe bending
 - High-frequency pipe lining
 - Piping design
- Surface Processing Business
 - High- and medium-frequency heat treatment
 - Roll production
 - Grinding
 - High-frequency quenching
 - Thermal spraying (metal, self-fluxing alloy, ceramic, cermet)
 - Laser quenching
- Equipment Business
 - Design, manufacture and installation of equipment
 - Manufacture and sale of induction heating devices
 - Testing, research and development of equipment
- Steel reinforcement Processing Business
 - T-Head const. method bar processing
- DHF Bi-met Business
 - Bimetallic boiler tube and panel (BT&P)
 - Bimetallic steel pipe (BML)
 - Bimetallic DB-alloy cylinder (BMC)
- Public Work Business
 - Manufacture and sale of water-transport lining pipes and shaped steel pipes
 - Manufacture and sale of flexible joints (Y-joints)
- Research and Development
 - New technology
 - New products
 - Design
 - Production technology

■Industrial Properties (as of May 2017)

- Domestic
 - Patents: 131 Pending : 45
 - Utility models: 2
 - Trademarks: 46
- Overseas
 - Patents: 38 Pending : 16
 - Trademarks: 26 Pending : 0

■Certificates

- Constructor / Plumbing, Painting, Steel Structure, Scaffolding, Earthwork (2016)
Ministry of Land, Infrastructure Transport and Tourism, Japan
- Registration to Japan Waterworks Association
Certified factory / Polyethylene powder lining steel pipes
- Nippon Kaiji Kyokai (1977)
Bending of pressure steel pipes by high-frequency heating
- JIS (2007)
JIS B 6912 : 2002
Process of induction hardening and tempering of iron and steel
Authentication No. JQ0807005
- Piping
Certification of piping procedures and workmanship per ASME Sec. II & IX.
Certification of welding procedures and workmanship per Electric industry Law
- Certificate per ISO 9001 (1995)
Tokyo Division
- Certificate per ISO 9001 (2000)
Kawasaki Division
- Certificate per ISO 9001 (2010)
Kansai Division

Head Office and Businesses

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● Divisions

Research and Development (Kawasaki)

Research and Development (Fukuoka)

Equipment Business (Kawasaki)

Equipment Business (Fukuoka)

Equipment Business (Tokyo)

<Sales Offices>

Tokyo Sales Office

Kawasaki Sales Office

Kansai Sales Office

Fukuyama Sales Office

Kita-kyushu Sales Office

Nagasaki Sales Office

Okinawa Sales Office

Jakarta Representative Office

<Works>

Chiba Works

Niigata Division

Saitama processing center

Funabashi processing center

Kawasaki Works (Tonomachi)

Kawasaki Works (Mizue)

Akashi Works

Aichi processing center

Osaka processing center

Akashi-Higashi Works

Nogata Works

Kyushu production section

Nishida Works

Nagasaki Works

Sasebo Works

● Overseas Affiliates

■ China

DAIICHI HIGH FREQUENCY NANTONG CO., LTD.
No.35 South Tongfu Road, Nantong Economic & Technology
Development Zone, Jiangsu, China TEL +86-513-8919-6330

■ South Korea

MJ TSR CO., LTD.
Head Office & Factory
TEL +82-51-832-0002
Ulsan Factory
TEL +82-52-257-8322

MJ ENG CO., LTD. (MEC)
TEL +82-52-257-9451

■ Taiwan

THINTECH MATERIALS TECHNOLOGY CO., LTD.
TEL +886-7-6955125

