



Installation of World's Largest High Speed Balance (HSB)

Brief History

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| <p>1910 Started machine manufacturing and repairing as an independent annex to Hitachi Mine, Kuhara Mining Co., Ltd.</p> <p>1912 Started marketing products as Hitachi Seisakusho Kuhara Mining Co., Ltd.</p> <p>1918 1,000 kVA Steam Turbine Generator completed.</p> <p>1920 Incorporated as Hitachi, Ltd. with ¥10 million paid-in capital.</p> <p>1930 Kaigan Factory established.</p> <p>1933 2.8 MW Land Steam Turbine completed.</p> <p>1945 Kaigan Factory destroyed.</p> <p>1956 The electrical machinery repair shop was named the Initial Workshop and restored in the Kaigan Factory.</p> <p>1972 The first Nuclear Turbine (138.6 MW) completed.</p> <p>1988 The first H-25 Type Gas Turbine (25 MW class) completed.</p> | <p>1993 Gas Turbine Research & Development Center built.</p> <p>1997 70 MW Class Superconducting Generator completed.</p> <p>2010 Celebrated its 100th year in business.</p> <p>2011 Kaigan Factory damaged during Great East Japan Earthquake. (Declaration of full restoration made after two weeks.)</p> <p>2014 Mitsubishi Hitachi Power Systems, Ltd., a joint venture company formed by Mitsubishi Heavy Industries and Hitachi, integrating thermal power generation systems and other related businesses, established. Mitsubishi Hitachi Power Systems' Hitachi Works was formed as a result.</p> <p>2016 Hitachi Works Main Building Opened.</p> <p>2020 Renamed Mitsubishi Power, Ltd. Mitsubishi Power's Hitachi Works was formed as a result.</p> |
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Access

Hitachi Works

1-1, 3-chome, Saiwai-cho, Hitachi-shi, Ibaraki 317-8585, Japan
Phone: +81-294-20-8000

[By train] Take the JR Joban Line to Hitachi Station.
About 10 minutes on foot

HITACHI WORKS



Turbine Generator



HITACHI SINCE 1930

Powering the Energy Needs of Tomorrow

Hitachi Works was founded in 1930 as an electrical equipment repair and manufacturing facility. After nearly a century of developing sophisticated technologies, precision manufacturing and cutting-edge facilities, it has remained a microcosm of industrial pioneering and continues to push the envelope with societal enrichment as its primary objective.

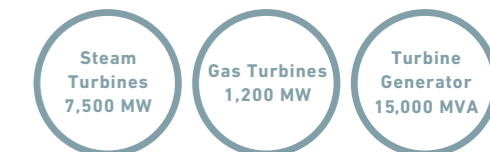
Area

About 434,000 m²

International Certifications

- ISO 9001 Quality Management System
- ISO 14001 Environmental Management System

Annual Production Capacity



HITACHI WORKS

Main Products



Thermal Power Steam Turbine Generator



Nuclear Power Steam Turbine Generator



Hydro Pump-Turbine (Commissioned product by Hitachi Mitsubishi Hydro corporation)



H-25 Gas Turbine



H-100 Gas Turbine

Outline



- 1 Main Gate
- 2 Main Office
- 3 Long Blade Welding Shop for Steam Turbines
- 4 First Combustor Shop for Gas Turbines
- 5 Second Combustor Shop for Gas Turbines
- 6 Large and Mid-Sized Fabrication and Welding Shop
- 7 Mid-Sized Component Shop for Steam Turbines
- 8 Gas Turbine Hot Parts Coating Shop
- 9 Steam Turbine Blade and Vane, Mid-Sized Component Shop
- 10 Gas Turbine Stationary Blade and Vane Shop
- 11 Gas Turbine Rotating Blade Shop
- 12 Steam Turbine Long Blade Shop
- 13 Generator Core Stamping Shop
- 14 Large Component Assembly Shop
- 15 Additive Manufacturing Shop (AM-Zone®)
- 16 First Large Component Machining and Assembly Shop for Turbines
- 17 Second Large Component Machining and Assembly Shop for Turbines
- 18 350-ton High Speed Balance (HSB)
- 19 Generator Component Control Shop
- 20 Large Generator Machining and Assembly Shop
- 21 Machining Shop for Generator Components
- 22 Generator Coil Shop

Main Production Facilities



CNC Large Rotor Lathe



High Speed 5 Axes Machining Center for Steam Turbine Blades



CNC Large Portal Boring and Milling Machine



Side-Entry Processing Machine for Turbine Rotor



CNC Horizontal Boring and Milling Machine (Spindle Diameter: φ200)

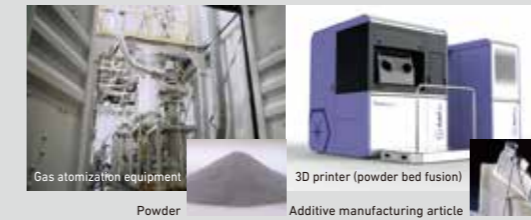


6,000-ton Hydraulic Press

Additive Manufacturing Shop (AM-Zone®)

Our company has original material technologies for metal additive manufacturing, which enables us to provide the alloys with optimized mechanical properties for different purposes. The Hitachi Works integrates whole AM production supply chain, which starts from the development and production of metal powder used as a material to metal additive manufacturing, product finishing, and even final inspections.

※AM: Additive Manufacturing



● Our equipment include master ingot melting, gas atomization, various types of metal AM equipment, machining equipment, and 3D dimensional measuring equipment.