

Daihachi Kogyo Co., Ltd.



Large-scale tower manufacturing with large roll bending technologies:
Experience manufacturing towers for onshore wind power generation as well

Category Wind Turbine Manufacturing > Large Plate Rolling & Machining



Integrated production from large roll bending to machining

Daihachi Kogyo specializes in processing large components such as large towers and tanks for paper mills, thermal blast furnaces for steelworks, cranes, and wind turbine props. In the field of wind power generation, Daihachi Kogyo has experience manufacturing onshore wind turbine props. The company has a proven track record in roll bending for a diverse range of products. The technological capabilities and level of experience the company has accumulated have earned it high appraisals from major domestic companies and others. Daihachi Kogyo achieves efficient and cost-effective manufacturing by completing all processes of material cutting, welding, machining, painting, and inspection in its own facilities.

Its main factory building area measures 30 m wide and 215 m deep. Equipped with some of the best processing equipment in the prefecture, including large bending rollers and five-face milling machines, the company performs bending of large parts and high-precision flange processing. It is capable of manufacturing large structures with maximum sizes of 9 m in width and 5 m in height and 40-t maximum weights. In addition to Daihachi Kogyo's integrated system involving everything from the arrangement and procurement of materials to manufacturing, shipping, and installation, its use of the nearby Kuroshima Public Wharf enables expedient shipping by marine transport.

- Production sizes and weights: For plate rolling items, bending processes support 36-mm thicknesses at 4-m widths and 50-mm thicknesses at 2-m widths, with maximum diameters 9 m and maximum heights of 5 m
- Materials: SS, SN, SD, and SUS materials, etc.

Adoption Record

Production of approx. a 70-m onshore wind power generation tower



Daihachi Kogyo fabricated a 70-m-long onshore wind power generation tower in three sections and bolted them together on-site. All processes were performed in the company's own facilities, including machining forged flanges with a vertical lathe, automatically cutting V-shaped bevels with an NC steel plate cutting machine, conical bending, welding, and painting. The level of precision attained with the flatness and perpendicularity of the flanges was highly appraised.

Manufacture of Rotary Kiln Cylinders



The requirements for manufacturing cylindrical components for rotary kilns used in cement production and other processes are extremely demanding, with an outer circumference length tolerance of +9 mm, an inner radius tolerance of +1.5 mm, and an inner diameter tolerance of +3 mm. In order to achieve such precision, dimensional control such as checking and inspection during fabrication is of great importance, as well as extensive expertise.

Main Equipment and Machinery

- Bending Roll: 32t x 4000mm / 1 unit
- 5-Axis Machining Center: 4000mm x 10000mm x 3500mm / 1 unit
- 4kW Laser Cutting Machine: 4m x 15m / 1 unit
- Plasma 500A & Gas Cutting Machine: 4m x 20m / 1 unit
- Vertical Lathe: φ7000 x H2880 / 1 unit; φ2200 x H1500 / 1 unit
- Pipe Coaster: 600A x 6m / 1 unit
- Overhead Crane: 5-20t / 4 units
- Single-leg Bridge Crane: 4.8t / 12 units
- Iron Worker: IW45III / 1 unit

Company Information

Business: Large Plate Rolling & Machining
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