DP CleanTech
Creating value from waste

DP Design, Engineering and Manufacturing Services - Poland

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Introduction

DP has a purpose built manufacturing facility located in Jędrzejów, Poland. The factory specializes in manufacturing technology components for DP projects and external customers including structural steel, pressure parts and boiler manufacture. The site has 2,500m^3 of manufacturing floorspace and 550m^2 of office space and employs approximately 100 skilled workers. With an established and extensive supply chain, multiple global accreditations and specialized knowledge sourcing, DP Manufacturing Services can provide reliable one-stop manufacturing and customized fabrication services for clients around the world.

Full Design and Engineering Services

DP CleanTech has longstanding and well recognized design expertise in boilers, pressure and non-pressure parts, grate components and complete boiler islands. Boiler islands comprise all parts of a power plant other than the turbine, including the boiler itself, the fuel handling system, the feeding systems and the combustion waste handling systems. The integration of power plant components is a core DP competence, and is an important factor in optimising the efficiency and performance of power plants.

DP CleanTech Manufacturing Facilities

DP's factory is a centre of excellence for core welding process technology, R&D, and is also a test facility for combustion systems and pressure part design solutions.

There are 2 workshops with different specialisations:

Workshop #1

2500m^2

- ✓ Drilling
- ✓ Bending
- ✓ Water wall welding by SAW method
- ✓ ECO, SH, APH manufacturing
- ✓ Block assembling
- ✓ Piping

Workshop #2

300m^2

- ✓ Block assembling of ECO
- ✓ Manufacturing of steel structures
- ✓ Manual welding of coils
- ✓ The storage area for stainless steel, fittings, elbows etc. is in this area.

Value Added Services

DP offers the following services in conjunction with a trusted independent NDT laboratory:

- Visual Testing (VT)
- Ultrasonic Testing (UT)
- Radiographic testing of weld (RT)
- Magnetic Testing (MT)
- Penetrant Testing (PT)
- Ultrasonic Thickness Testing (UTT)
- Hardness Testing (HL, HS, HB, HRB, HRC, HV)

Accreditations

- ISO 9001:2015 Quality standards
- ISO14001:2015 Environmental standards
- ISO 45001:2018 Occupational Health and Safety (OH&S)
- DIN-EN ISO 3834-2 Quality requirements for fusion welding of metallic materials
- AD 2000 - HP0 Steam boiler, pressure vessel pipes
- PED 97-23-WE, AD 2000-HP0, PN-EN 3834-2 TUV Welding Technical
- PN - EN 1090-1+A1+A15:A181:2012, Elements and steel constructions manufacturing
- WUDT – Manufacturing
- WUDT – Repair
- WUDT – Modernization
- ASME "S", Manufacture and assembly of power boilers
- ASME "PP", Fabrication and assembly of pressure piping

Manufacturing Scope and Capabilities

DP's capabilities enable the design and manufacture of products for external, customised projects. The flexibility of the shopfloor and the multiskilled workforce ensures that all products and services are of the highest quality. As a result we are trusted suppliers for structural steel parts for power generation across many industries, including the marine sector.

Membrane Wall Machine (SAW)

Membrane walls

The workshop has a membrane wall machine (SAW) with four torches that can deliver a maximum welding speed of 1.1m/min.

Membrane walls are manufactured with pipes up to ø88.0mm, which are suitable for industrial boilers as well as ultra-critical boilers with high pressure and temperature. Membrane manufacturing is possible for all normal material types, as well as P235GH; P265GH; 16Mo3 and 13CrMo45. Bending and welding machines are suitable for maximum widths of 1600mm and are particularly suitable for bending of spiral walls. DP's specialty is connecting flanges, spiral walls and funnels.

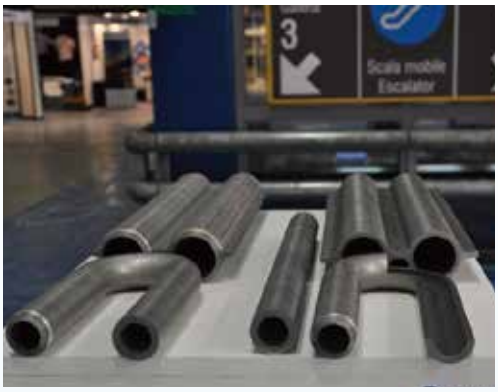
Tube Bending

Tube bending

DP's hydraulic bending machine has a bending range from ø 26.9 to ø 60.3 mm, and the capability to bend with R/d =>1, thereby accommodating the most stringent requirements for ovality and wall thickness.

Headers

The factory has two radial drilling machines and a CNC plasma cutting machine with 2 x 6m table to meet high pressure and high temperature requirements.



Inconel Tube Cladding

Inconel cladding

Inconel cladding is particularly utilized in biomass and waste-burning boiler plants because of its resistance to the corrosive gases which reduce the lifetime of a boiler. Adding Inconel cladding on exposed zones can considerably extend boiler life - but successful cladding requires a high degree of technical welding skill. DP has built up significant expertise and experience in general cladding of pipes and membrane walls and offers Inconel cladding as an added benefit.

Heat treatment

DP CleanTech has the thermal treatment equipment and the know-how to carry out even the most complex tasks. Full documentation of thermal treatment is always available, and further documentation can also be arranged. The largest oven can heat-treat up to 800°C and has dimensions of 1700 x 800 x 6000 mm. Other ovens can heat treat up to 850°C.

Acid cleaning

In cooperation with our partners we provide acid cleaning of parts in our workshop. Products are therefore easily built into the pressure systems without the added cost of acid cleaning of the entire installation.

Reconditioning / Modification

DP CleanTech is an expert in boiler system maintenance and service, offering a range of services from simple repairs and replacement parts to design, manufacturing and installation of new components and control systems to optimize performance.

Manufacturing and Services References

DP has around 100 references in Europe, and a further 10+ in other regions worldwide, supplying a broad range of customers and scope of supply.

For further information on DP Manufacturing, please contact info@dpcleantech.com