Workshop Fabrication & Welding Services

CNC PROFILING – PLATE ROLLING – SUBMERGED ARC WELDING
**HDS Energy** has over thirty years experience in the design, manufacture and installation of bespoke boiler solutions for large energy and power projects for clients in Ireland, Europe and North Africa.

Manufacturing is at the core of HDS operations. Continuous investment in our facility enables HDS to stay at the forefront of manufacturing technology. Plant and equipment include CNC plate cutting and profiling, orbital and submerged arc welding machines, a membrane wall welding facility for large industrial and utility type water tube boilers. Our In house design, draughting and 3D modelling capabilities allows us to offer clients a full scope of design and development pre-production. Industry sectors supplied include Water/Wastewater, Dairy and Food Production, Pharmaceutical, Oil & Gas, Renewable Energies, Chemical, Dry Bulk Storage and Minerals & Mining.

All manufacturing is carried out in accordance with the latest European standards and design codes. Welder approvals and welding procedures are updated constantly to comply with international standards and codes of practice. HDS Energy provides sub-contract manufacturing facilities to our clients where such services are not otherwise available in this market.
HDS Energy has provided a wide range of specialist energy system engineering and design services to clients in many different sectors of industry including:

- Biomass CHP Plants
- Pharmaceutical Plants
- Agricultural & Feed Plants
- Breweries
- Hospitals
- Food Processing Plants
- Electric Power Generating Plants
- Manufacturing Plants
- Public Utilities
- Water Treatment Plants
This knowledge and skill has led to our diversification into providing other services, in-house or on site, to the public sector, industry and utilities. Primary considerations in these solutions are cost effectiveness, energy efficiency and environmental responsibility. These services include:

- Sub Contract Manufacturing
- Maintenance
- Reverse Engineering
- Fabricated Pipework
- Specialist Fabrication
- Repairs
- Pressurised Vessels
- Tank Fabrication
- Access Platforms
- Stairs
- Walkways
We have over 50,000 Sq. Foot of workshop space at our manufacturing plant in Kells, Co. Meath, Ireland.

Our manufacturing team is made up of skilled, time served tradesmen and coded welders.

Auto Cad and Studio Works 3D drawings are sent to the workshop for fabrication, using our own designs or customer produced drawings.
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Specialised Welding

- Sub-contract design
- Sub-contract manufacturing
- Maintenance
- Repairs
- Specialist Fabrications
- Reverse Engineering
- Fabricated Pipe-work
- CNC Plate cutting and profiling
- Heavy Plate rolling
- Submerged Arc welding
- Orbital welding
- Machining
ESAB mobile Submerged Arc welding machine mounted on 40 meter long tracks. Ideal for welding of plates of various thickness and diameters.

This machine is used for the welding of Steam Boiler Shells, Pressure Vessels, Chimney Stacks, Pipes and any plates that have to be welded to a high standard from 6mm thick up. Diameters of up to 5 meters can be welded using this machine.

Submerged Arc Welding can be used for both Carbon and Stainless steels.

Advantages of using Submerged Arc Welding are consistent quality of weld deposited. Deposition rate of weld up to eight times faster than manual welding therefore reducing labour costs significantly.
CNC Plasma and Oxygen fuel heads fitted to the CNC Profile machine allow for the profiling of Carbon steel, Stainless steel and Aluminium.

The cutting bed can accommodate a sheet size of 4 meters wide by 14 meters long for profiling.

Advantages of cutting plate with this machine are that accuracy of parts cut are consistent and with the use of the multiple cutting heads time for cutting of numerous parts can be greatly reduced. Due to the cutting bed size large plates that have to be cut for rolling can be prepared in an efficient manner, saving considerable time and costs.

Multiple cutting programs can be stored and can be recalled at the press of a button for repeat orders.
• Full hydraulic four roll CNC plate bending machine capable of Pre-bending plates up to 22mm thick over the full 3 meter width of the machine and of rolling plates up to 30mm thick over the full width of the machine.

• Diameters down to 450mm can be achieved with this machine depending on plate thickness.

• Advantages using this machine are that the CNC Controller can record and perform multiple rollings thus reducing set-up time on each job, ensuring significant savings whilst giving consistently accurately rolled cylinders.
We manufacture CE marked pressure vessels in accordance with European Pressure Equipment Directive 97/23/EC (the PED) and are made with both carbon or stainless steel with grades specific to the application for the finished vessel.

All vessels are bespoke and are designed to meet customer specifications with independent design verification, inspection and certification by a Notified Body.

Pressure Vessels for Industry:

- Oil & Gas
- Pharmaceutical & Chemical
- Alternative Energy
- Dairy
- Food Production & Brewing
- Manufacturing
Site Works & Energy Plant Services

Site Works

- Removal of rear wall on watertube boilers and installation of new formed tube panels
- HDS Energy offer on-site boiler repair services and can carry out work on watertube and shell boilers
- Upgrading of systems is also a speciality of HDS Energy - design, manufacture and installation of Economisers and Control Systems would be part of upgrading any system giving the client greater operating efficiency and significant fuel savings.

We also offer complete Boiler Services including:

- Insurance Inspection Strip Down and Re-assembly
- Retubing
- Welding Repairs
- Pump & Valve repair/replace
- Fuel Conversion Solutions
- Refractory

* Boiler Panel Walls under construction at our plant in Kells, Co Meath
For more information on our extensive range of workshop services and to discuss your particular requirements, please contact us:

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