#### **Excel Power Construction Ltd**

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## **Excel Power Construction Ltd**

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#### Pipework

Piping and pipe workings play a critical role especially in the chemical, power generation and heavy industry.

#### We design, supply and install:

- Piping design (Stainless, carbon steel, etc.)
- Pipe stress analysis (Pipe CAD)
- Fluid piping
- Piping support design
- Process air/plant air/utility piping
- Mechanical equipment for piping & construction

#### **Chemical Industry**

The chemical industry is subject to high safety controls and we supply and/or maintain corrosion resistant pipeline systems in both stainless steel 304 and stainless steel 316. We also carry out the following:

- Site Survey
- Tank Testing to EEMUA 157
- Corrosion Resistive Pipework

#### **Power Generation**

We have extensive experience of high pressure pipework systems from our work within power stations and are specialists in the following:

- Hydraulic & Water Lines
- Steam Pipelines

#### Light & Heavy Industry

In addition to standard pipework we also supply extraction and ventilation systems.

#### Ducting – Design & Installation

- Dust and fume collection
- HVAC



#### Fabrication

As well as our specialised work within specific industry sectors, we carry out custom and bespoke fabrications to meet any client's requirements.

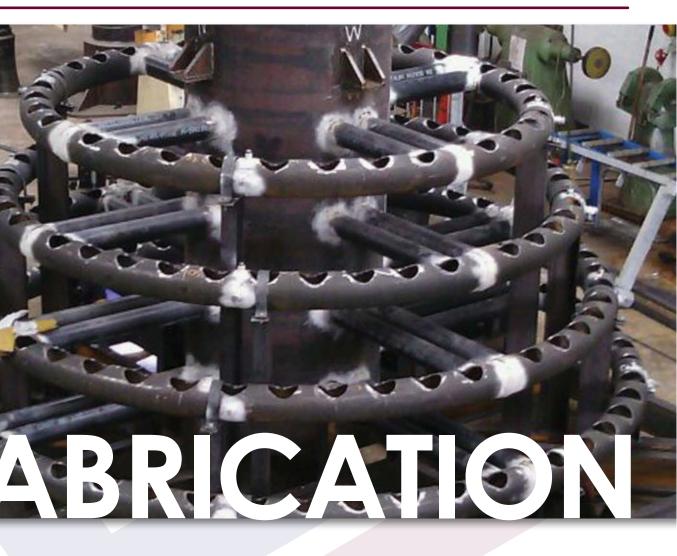
From client liaison/site visits to full design and fabrication drawings right through to manufacture and installation; we offer the complete package.

Clients include members of the heavy and light industrial corporations to local residential construction.

#### Range of Experience

Our highly trained work force fabricate not only steel plating but the full range of ferrous and non ferrous metals. We are able to undertake profile development to exacting designs.

We also have extensive experience in the fabrication of pressure vessels and tanks.



#### **Fabrication Capabilities**

The images show stages of our fabrication capability from high pressure systems, to the building of an office stairs.

The website gallery also has many examples of our fabrication work.





#### **Structural Steel**

From Initial design to fabrication drawings and design calculations through to manufacture, surface finish and erection. Excel Power Construction offers a complete package for any structural steel requirements.

Excel Power has been commissioned to manufacture and erect structural steelwork for a vast range of projects, from steel portal and lean-to buildings to canopies and extensions.

#### Installation and Erection

Excel Power Construction is in the enviable position through having years of experience with on site constructions of steel structures from heavy industrial sites, retail parks, homes and offices.

Our on site services complete what we consider to be a 'one stop shop' insuring your high quality structures are securely and safely installed.

All structural steel is CE marked to our UKAS Accreditation.





#### Welding

As specialist Arc and Gas welders we can perform work on Ferrous & Non Ferrous metals either in our South Wales workshop or on site anywhere in the UK, Europe and the World.

Our many years of expertise means our staff are used to working in the power and chemical industries where it is essential for the correct procedures to be identified and applied in high temperature and highly corrosive situations.

Our welders all carry the BSEN 287 Accredited Qualification with BSEN 288 Procedures Accreditation.

These welding techniques use the following:

- MMA Manual Metal Arc Welding
- TIG Tungsten Inert Gas Welding
- MIG Metal Inert Gas Welding

#### **Types of Welding**

We carry out the following types of welding techniques:

- Carbon Steel Welding
- Cast Steel Welding



- Aluminium Welding
- Bronze Welding
- Stainless Steel Welding

The latter covering high corrosion resistant welding, low temperature welding and high temperature welding for highly corrosive welding industrial use.

#### **High Temperature Welding**

For High temperature boiler pipes, tubes etc we offer specialist high intensity pressure part welding as follows:

- 9% Chrome Welding
- 2 1/4% Chrome and ½% Molybdenum Welding

See also stress relief heat treatment.

#### High anti corrosive welding:

- Duplex Welding Anti Corrosive
- Inconel Welding Anti Corrosive Resistance

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#### **Heat Treatment**

Post welding stress relief heat treatment is an essential process to ensure the removal of stress corrosion cracking (SCC), caused by internal or residual stresses near welds. These can make the areas brittle and prone to fracture.

Excel Power Construction have proven systems and technical expertise to ensure metals are able to be heated to high temperatures, as in the case of pipework, so that they can be welded after which controlled cooling using thermal couples is required. All stages of the process require careful temperature monitoring and adjustment.

#### **Stress Relief Process**

Careful heating and subsequent uniform cooling is essential, and here at Excel Power Construction, we have years of hands on experience and with the use of thermal blankets, and constant precise temperature monitoring (via thermal coupling), this is achieved to exacting standards.

Where chrome molybdenum steels usually need stress relieving in the 675 to 700°C temperature range it is essential in all cases that a full understanding of the alloying system and previous heat treatment is taken in to consideration prior to commencement of work.

This is a highly complex field of welding and one of our engineering team advisors will be able to assist with any enquiries you have. Call now: **(+44) 01656 661188** for free initial advise.



#### **On Site Services**

In addition to our other areas of expertise; Excel Power Construction are strongly committed to providing a 'one stop shop' approach to our clients requirements.

Health and safety is a matter we take very seriously and all managers and supervisors are IOSH qualified.

In addition to this, all our workforce hold valid ECITB safety passports.

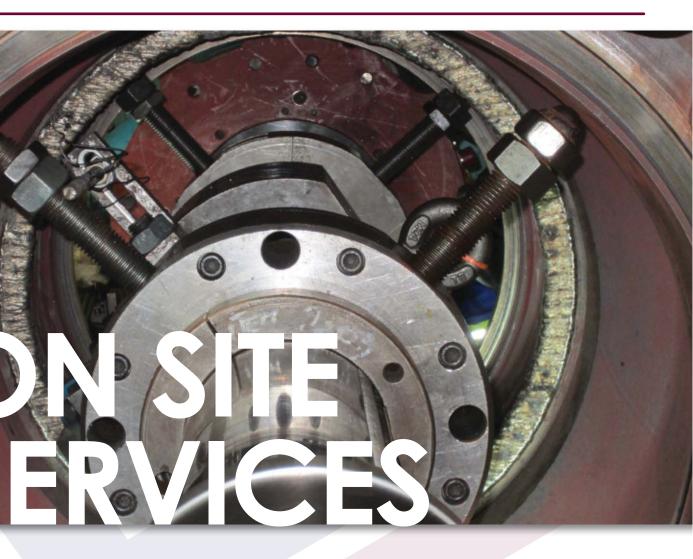
#### Power Industry

Installation and maintenance of large structures within the power production industry is one of our strong points and we have dedicated teams for this exact purpose. We have many examples of our work throughout the UK.

#### **On Site Services Offered**

We can offer the following on-site services:-

- Pipe prepping/beveling /cutting
- Torque tightening



- Flange facing
- Stud removal
- Portable thread machining
- Stress relieving heat treatment
- Oval facing
- Drilling and reaming





#### **Total Recruitment Solutions**

Excel Power construction has vast experience within the power generation and engineering industry which has been built up over several decades and is using this depth of knowledge further, by offering our clients an additional service of recruitment.

Excel Power Recruitment is your total manpower solution provider for both permanent and contract recruitment across the UK and Overseas. We cover all aspects of recruitment, providing specialist technical personnel for each sector, giving the client the confidence in using our expertise.

Managed by staff with many years' experience within the recruitment sector, we have great pride in our ability in developing relationships, adding value and offering a first class service. With an extensive multi-disciplined candidate database, we are well placed to meet any client vacancy which might arise. All candidates are extensively reference checked, ensuring ability, aptitude and reliability. In addition, all are subject to identity checks and are fully work referenced for the last 3 years (which are available on request). This ensures our personnel have the relevant experience and qualifications to meet any client demand.

Our mission is to be a working partner with our clients, not just service a provider.

# Excel Power Recruitment was initially formed to operate within specific industry sectors including:

- Engineering
- Petrochemical
- Power Generation
- Construction
- Manufacturing

## The company is also diversifying into other market sectors, including but not limited to:

- Leisure/Entertainment
- Office Staff/Admin personnel
- Health & Social Care
- Finance Personnel/Teaching Personnel

Should you be interested in any of these sectors, please send your C.V. to **info@excelpower.co.uk** 

Please visit www.excelpowerconstruction.com for further details.