Steel Fabrication
ECS Capabilities

ECS Fabrications delivers a wide variety of metal fabrication work, from precision machine frames to large structural steel assemblies with individual components anywhere from 100kg to 40t, with package sizes up to 1000t.

All our structural metal fabrication work has CE Marking approval to EXC3 and our well-equipped and highly skilled engineers can complete structural steelwork, bespoke fabrication and access metalwork to the highest standard.

Fabrication

ECS Engineering Services is an expert steel fabrication supplier. We have a purpose-built fabrication workshop encompassing 40,000 sq ft and a combined craneage capacity of over 40t. We can handle a wide range of large bespoke fabrications, while retaining the ability to deliver high-volume fabrication work, which gives us the ability to deliver a fast reactive service where required.

Our 3.5 acre fabrication site in the North Midlands also includes our own 1 acre steel stockyard under cranage. Our fabrication plant includes CNC Machinery - High Definition Plasma cutting, drills and drill / saw line plus Guillotine, Press Brake, Rollers and Synergic Welding Plants.

This plant is combined with a highly skilled, flexible workforce comprising certified welders, platers, machine operators and inspectors, able to work 24hrs to complete large fabrication contracts.
Products & Markets

ECS offers a diverse and adaptable fabrication capability with over 25 years experience across a wide marketplace. Our client portfolio reaches across the construction industry, utility and water management sectors and the power generators (including the demanding nuclear sector).

We possess a core capability in providing high quality structural steelwork and access metalwork and an ability to output at a high rate, together with the level of cost effectiveness, quality and timeliness demanded in competitive markets.

Our abilities extend further into the arena of specialist, custom steel fabrications that require a greater level of skill and flexibility from our staff and from our premises. These special projects include all types of bridges, large structures such as water control gates, lock gates, temporary works fabrications and one off, or small batch, complex fabrications that demand a high level of quality, which can only be provided successfully by an organisation with our depth of experience.

To contact the ECS Fabrications team call 01773 860001 or email us using the contact form on the website www.ecsengineeringservices.com
Technical Service

Our technical office employs a range of skilled engineers and technicians utilising the latest Design Analysis & BIM compatible 3D Modelling platforms. All design work is carried out in accordance with Eurocode or other contract specific requirements. Models can be exchanged between design and detailing functions, and coordinated with clients and complimentary trades. We have direct links from our 3D detailing software to our CNC workshop equipment for accurate and efficient manufacture.

Our engineering team has a wide range of experience of working on construction industry projects (including commercial buildings, residential, retail, education and security) alongside infrastructure projects (power, transport and water utilities).

ECS is able to design and detail complex structures, together with testing in a virtual environment prior to manufacture and installation.
“It is essential to get the initial data collected quickly and accurately. By using our RTS equipment and the data it collects, our technical team are able to create the fabrication drawings more efficiently, which helps to streamline the project as a whole.”

Steve Crapper - ECS Business Development Manager

Case Study: ECS build 8 radial weir gates for EA refurbishment of Thames structure

ECS Engineering Services supplied eight radial weir gates to the Environment Agency as part of a project to improve the Old Windsor Weir on the River Thames. Using the latest 3D survey equipment, ECS has been able to develop precision drawings for the fabrication team, ensuring the contract was delivered on time.

ECS was able to survey the site in detail using its advanced surveying equipment, which enabled the design teams to start work almost immediately. Although the site appears to use eight identical radial weir gates, the RTS survey equipment quickly determined any differences, ensuring that every new gate fitted perfectly.

A Robotic Total Station (RTS) is an extremely accurate survey instrument that provides a sub-millimetre level of accuracy and can be used to collect sufficient data to create a 3D model as well as fabrication drawings. Using this advanced equipment has allowed ECS to minimise any delays at the beginning of the project and also develop a full set of 3D visuals for the client as well as any other interested parties.
Accreditation

From 1st July 2014 all fabricated structural steelwork must meet the harmonised European standard BS EN 1090 and carry the CE mark. ECS has maintained its investment in both personnel and quality control systems to ensure that it achieves certification, which is determined by an independent assessment. The accreditation also ensures that ECS continues to maintain its membership of the British Constructional Steel Association (BCSA).

ECS has been accredited to EXC3, which has a more arduous approvals standard but allows it to fabricate the vast majority of steel structures.

The certification provides evidence of a suitable Factory Production Control (FPC), which ensures traceability of every component from source, through the fabrication process and final delivery to site.

ECS also has accreditation to BS EN ISO9001, 14001 and 18001 as well as BS EN ISO3834-3.
Designs can be created by the in-house technical team and then constructed in the large fabrication facility.

Equipped to deliver.

- Structural steel shop with Peddinghaus Saw Drill Line
- 3m wide Press Brake with 100 tonne capacity
- 400A Plasma Cutter with 50mm capacity
- 30 Welding plants, including Synergic MIG Pulse Welders
- 1 acre stockyard under cranage to ensure material availability