

## Fabrication Solutions

TM service is derived from our extensive knowledge of every aspect of heavy steel fabrication, and the completion of countless complex and large structures, up to 50 tonnes in weight; providing credible solutions to difficult fabrication projects.

Our engineers are highly experienced and qualified to work with all grades of Carbon Steel and Stainless Steel. Welding operatives' are fully coded for MMA, MIG and TIG welding with considerable experience of NDE testing, by Dye Pen, MPI, radiography and ultrasonic inspection.

### STANDARDS

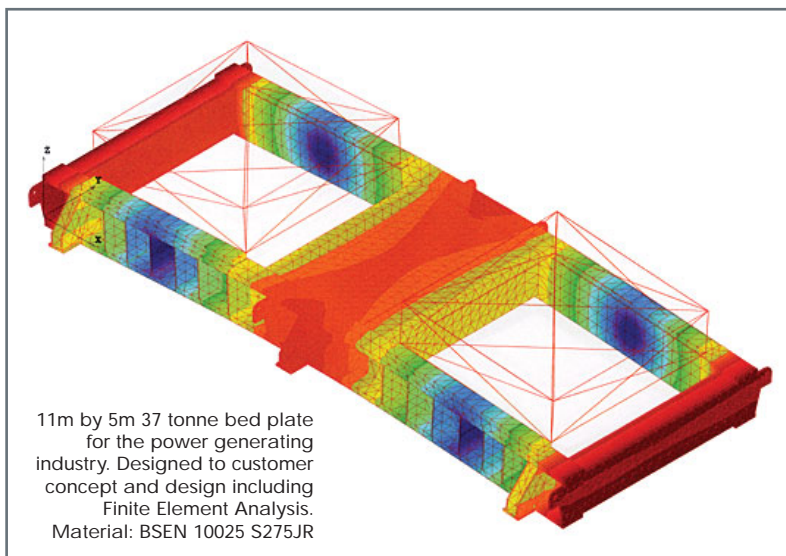
Building heavy steel structures requires high levels of experience, competence and qualification; we have Germanischer Lloyds Welding shop Approval and work analogously with Welder Fabricator Certification Scheme: Welders approved to AWS D1.1:2002, BS EN287-1, ASME Ix, EN 729, ISO 3834 and EWF requirements.

### DESIGN

TM's fabrication engineering service can be supplemented with specialised design when required. Cosmos/M software is used for structural analysis which allows the CAD solid models to be input directly to FE programmes; enabling frequency response and material and geometric non-linearity to be handled in addition to normal linear elastic static Finite Element data. STAAD/PRO is used for specific application to structural steel design; conforming to all recognised international design codes of practice. Fabrication design and finite element analysis is performed to BS EN ISO 9001:2008



50 tonne bed plate for the power generating industry. Welding to AWS D.I.I. 100% ultrasonically tested and magnetic particle inspection. Material: BSEN 10025: 1993 S355EM. Documents to EN 10204-3.1



11m by 5m 37 tonne bed plate for the power generating industry. Designed to customer concept and design including Finite Element Analysis. Material: BSEN 10025 S275JR

CONFIDENCE . CAPABILITY . COMPETITIVENESS . INTEGRITY . PROGRESS

HSF 01B

# HEAVY STEEL FABRICATION



## BENEFITS

- Professional highly customer focused service
- On time delivery
- Provide material certification in accordance with EN 10204-3.1
- Working relationships with Lloyds Register of Shipping, American Bureau of Shipping, Det Norske Veritas and Bureau Veritas.
- Excellent quality
- Competitive pricing
- Coded welders
- Complementary large part precision machining
- Undertake stress relieving and painting processes
- Receive and transmit drawing information electronically

Fabrication for the marine industry inspected by Lloyd's Register of Shipping. Documentation to EN 10204 3.1



## Fabrication Shop Equipment:

### Welding

CO<sub>2</sub> up to 460 Amp 1.6 wire  
Electric Arc up to 600 Amp. Approval to Lloyds Register through E N 287, BS4870, ASME IX & A.W.S. D1.1.90  
For parent metals: 43A Fe 430A S275, 50A Fe 510D1 S355 J2G3 & 316L.  
Stainless to Mild from 5mm to 80mm plate and greater than 150mm O/Dia Pipe

### Profiling

2 - Messer Griesheim CNC controlled co-ordinate drive, multi head flame cutting machines Tracing width 2000 mm, max. thickness 200 mm  
Working width 2600 mm on 12 metre track

Shearing • Rolling • Bevelling  
Drilling • Sawing

## Fabrication Shop

### BAY 1

Floor area 40' wide x 100' span x 16' to bottom of crane rail. Max Lift 10 Tonne.

### BAY 3

Floor area 50' wide x 100' span x 27' to bottom of crane rail. Max Lift 50 Tonne.

## Contact

Email: [sales@tmengineers.co.uk](mailto:sales@tmengineers.co.uk)

Telephone: 44(0)1384 400212

Fabricated C frame with blemish free high quality paint finish.

Material: BSEN 10025: 1993 S275JR



Stainless Steel fabrication  
Material: BSEN 58J



CONFIDENCE . CAPABILITY . COMPETITIVENESS . INTEGRITY . PROGRESS