INNOVATIVE VALUE ADDED SERVICES
YOUR SUPPLY CHAIN PARTNER
VALUE ADDED SERVICES

At Kloeckner Metals UK we strive to grow partnerships with our clients by developing innovative value added services and introducing digital technologies. We continuously invest into companies' know-how and processing technologies, so we can deliver cost efficient metal solutions and high quality steel products. This way clients benefit from our expertise and innovation, which allows them to keep ahead of the competition.

ISO 9001
ISO 14001
BES 6001
ISO 45001

BS EN 1090
TUBE LASER

TUBE LASER CUTTING
Throughout the years Kloeckner have established ourselves as one of the leading processing suppliers in the UK. Located in Dudley, in the heart of the Midlands, Kloeckner’s laser processing facilities now feature 7 state of the art laser cutting machines which allow us to provide our customers with the complete in-house solutions no matter how large or small their cutting requirements.

LT14 JUMBO LASER CAPABILITIES

<table>
<thead>
<tr>
<th>Max Round mm</th>
<th>Max Rectangle mm</th>
<th>Max Square mm</th>
<th>Channel mm</th>
<th>Equal Angle mm</th>
<th>Unequal Angle mm</th>
<th>Universal Column mm</th>
<th>Universal Beam mm</th>
<th>In / Out m</th>
</tr>
</thead>
<tbody>
<tr>
<td>355</td>
<td>300 x 200</td>
<td>250 x 250</td>
<td>300 x 100</td>
<td>200 x 200</td>
<td>200 x 150</td>
<td>254 x 254</td>
<td>305 x 165</td>
<td>15.5</td>
</tr>
</tbody>
</table>

LT14 JUMBO LASER
LT14 Jumbo laser tube cutting has brought significant processing and economic benefits to the fabrication and assembly of mechanical sections in a wide range of applications. These include:
• In addition to processing Hollow Sections / Tubular products, the new Jumbo laser can also process Beams, Columns, Split Tees, Angles and Channels
• Ability to process parts up to 355mm in diameter and weight up to 100kg/m
• Ability to laser cut 20mm thick mild steel and weld prep 16mm thick mild steel material up to 45 degrees
• Shorter lead times – machine’s latest touch screen interface uses an operating system that is up to 30% faster than previous versions
• Our Jumbo laser is programmed using the latest generation of Artube 3 CAD software which can now import full 3D models / assemblies including IFC files (Tekla), STEP, IGES and X_T
• Loading and unloading are 15.5m infeed and 15.5m outfeed - first for an LT14 in the UK
• Improvements in productivity, with users reporting increases from 70% to 80% compared to conventional processes
• Reductions in downstream assembly costs thanks to the possibility of obtaining stricter fabrication tolerances resulting in high quality and accurate assembly components
• Allows creative design and further supports innovative solutions
**LT8 TUBE LASER**

Part of our extensive portfolio also includes LT8 multi-axis 3D tube lasers. Fully automated and CNC controlled they can process Stainless Steel, Mild Steel and Aluminium sections cleanly and consistently. The LT8 3D tube laser is highly flexible and user-friendly, performing top quality and extremely precise laser cutting, on tube diameters from 12 to 220mm and a bar weight up to 35kg/m. Equipped with a tilting head, it allows 3D cutting on all sections (open and special profiles included).

**LT722D TUBE LASER**

In addition to round, square and rectangular shapes the LT722D laser is ideal for processing special sections. The machine does not require expensive tooling to produce complicated mitred parts that perfectly match or extremely accurate connections that interlock. LT722D is a fully automated CNC controlled laser which can cut Mild Steel, Stainless Steel and Aluminium (some alloys) and is capable of achieving a much higher production rate. Being fully automated from loading to unloading, the machine can adjust to different size and shaped materials very quickly making the LT722D ideal for large or small batches.

### LT8 & LT722D LASER CAPABILITIES

<table>
<thead>
<tr>
<th></th>
<th>LT8</th>
<th>LT722D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Round mm</td>
<td>220</td>
<td>120</td>
</tr>
<tr>
<td>Max Rectangle mm</td>
<td>200 x 100</td>
<td>120 x 60</td>
</tr>
<tr>
<td>Max Square mm</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>Channel mm</td>
<td>200 x 90</td>
<td>n/a</td>
</tr>
<tr>
<td>Angle mm</td>
<td>200 x 200</td>
<td>n/a</td>
</tr>
<tr>
<td>Flat Width mm</td>
<td>200</td>
<td>n/a</td>
</tr>
<tr>
<td>Max Steel Wall Thickness mm</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Max Stainless Wall Thickness mm</td>
<td>4</td>
<td>n/a</td>
</tr>
<tr>
<td>Max Aluminium Wall Thickness mm</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

### WHY USE OUR TUBE LASER SERVICES

- Flexible lead times
- Capacity to process large volumes of project work
- Provision of ‘kits’ of parts ready for assembly
- The ability to service contractual work and repetitive requirements
- Access to skills and expertise
- High accuracy guaranteed with Nikon MCAX – precise, reliable 7-axis measuring equipment
Our extensive flat bed laser facilities offer the latest technology in both fiber cutting and CO₂ processing up to 4000mm length and 2000mm width. We can carry out large volume and small batch profiling and ensure any material used is fully traceable and comes with mill certificates when required.

**1 X BYSTRONIC FIBER LASER**
- 6kw resonator (max)
- Max cut length 4000mm (max bed length 4050mm)
- Max cut width 2000mm (max bed length 2025mm)
- Max bed plate weight 1600kg

**2 X BYSTRONIC CO₂ LASER**
- 6kw resonator (max)
- Max cut length 4000mm (max bed length 4050mm)
- Max cut width 2000mm (max bed length 2025mm)
- Max bed plate weight 1600kg

**PRODUCTS**
- Stainless Steel
- Aluminium
- COR-TEN®
- Galvanised Steel
- Carbon Steel
- Non-ferrous

**CAPABILITIES**
- Material designated machines (to eradicate material cross-contamination)
- Automation / efficiency (all machines have OEM loading systems)
- CE marking to Execution Class 4
- Cut quality (thermal best in class)
- Cut tolerances (+ / - 0.025mm)
- Max cutting thickness 25mm
- Eradication of secondary processes (elimination of drilling / machining)
- Etching identification (part numbers can be automatically etched on the profile)

**PLANAR MEASURING SYSTEM**
The Planar measuring system allows us to increase accuracy and ensures that parts are manufactured to the correct specification. It enables Kloeckner to speed up the process for our customers, therefore saving money and increasing the quality of the product supplied.
WATER JET

The uniqueness of water jet cutting is that no heat is input into the component through the cutting jet, this means that there are no structural changes in the processed material.

Water jet cutting allows efficient production, particularly with single part manufacturing; high machine accuracy and surface quality at the cut edge. What’s more, with water jet cutting no pollutants are created during the cutting process.

CAPABILITIES

- CE, no heat is transferred to profile so CE marking is exempt for construction
- High quality cut
- Cutting tolerances (+ / - 0.25mm)
- Cut up to 200mm thick in all metals
- No heat affected zone (maybe specified for this reason due to application)
- Max length 4000mm
- Max width 2000mm
- Bystronic Byjet technology

BENDING

At Kloeckner Metals UK we can now also offer precision bending / pressing of materials into bespoke 3 dimensional shapes to suit your requirements. The Bystronic Xpert 320 / 4100 press brake has the capability to offer the highest level of repetition accuracy at the press of a single button. Using pressure reference technology with fully automatic crowning, it is capable of delivering first class bending results on parts up to 4100mm long, combined with a maximum of 320 tonnes of pressure if required.
OFFERING BESPOKE SOLUTIONS
Kloeckner Metals UK Plates & Profiles carries over 5000 tonnes of stock at our strategically located 31,000 m² centre of excellence in Durham. The site also houses an extensive range of profiling, drilling and bevelling equipment.

Our 20 tonne lifting equipment enables us to stock large area plates up to 14m x 4m in a number of grades, ranging from structural steels through to pressure vessel, boiler and offshore grades. The stock is complemented by our HD plasma profiling machines which offer large area cutting with a high level of accuracy up to 35mm thick, along with our Oxy-fuel process which cuts plate up to 200mm thick. In addition to profiling services we also provide drilling and bevelling services.

PLASMA & OXY-FUEL PROFILING

Kloeckner Metals UK are able to offer Hot Rolled and Reversing Mill Plate in a market leading range of steel grades and sizes both as full plate or as profiled parts. Significant investment in machinery and handling equipment has established high capacity profiling operations in two sites allowing us to offer a competitive lead time nationwide. The plasma and Oxy-fuel cutting service are complimented by on-site drilling and edge preparation capabilities.

CAPABILITIES

PLASMA PROFILE CUTTING
- Hi-Def cutting up to 100mm thick
- Full cutting capabilities up to 4m wide
- Full cutting capabilities up to 13000mm in length
- Multiple head machines for maximum efficiency
- Standard tolerance + / - 2mm, tighter tolerances available on application
- Full plate etching available across all machines
- Bolt hole technology

OXY-FUEL PROFILE CUTTING
- CE marking to Execution Class 4
- Cutting capability up to 200mm
- Individual piece weight of 18 tonnes
- Multiple head cutting for maximum efficiency
- Standard tolerance + / - 3mm, tighter tolerances available on application
- Full cutting capabilities up to 13000mm in length
- Full cutting capabilities up to 3200mm wide

DRILLING
- Plates
- Bed size: 3000mm x 1800mm
- Up to 52mm holes
- Deep hole, chip breaking cycle
- Tapping M30
- Countersinking
- Light milling
- Chamfering
EXPERTS IN DESIGN & VALUE ENGINEERING
WESTOK

Kloeckner Metals UK | Westok is the market-leading designer, manufacturer & software provider of Cellular, Plated, Shallow, Box, Cambered, Curved, Tapered floor & roof beams in the UK, Ireland and Mainland Europe.

Over the past thirty years we have established an impressive track record of delivery across a diverse range of sectors. We offer a free project design service with a team of experienced Structural Engineers, along with free CPD seminars, and free analysis, design, vibration & BIM software solutions.

We have invested heavily in recent years and our modern manufacturing facility boasts state of the art plasma-head profiling capabilities, a submerged arc welding T&I line to facilitate the rapid automated manufacture of the Westok Plate Beams, an automated beam-assembly unit and a new automated Saw & Drill line for the processing of Cambered and Asymmetric Westok beams. We are CE marked to Execution Class 4.

CAPABILITIES

- Saw and drill supplied for beams from 2.5m up to 20m length, 500mm width and 1155mm in depth
- Ability to process Asymmetric beams from 9m up to 20m
- Ability to process Cambered beams from 2.5m up to 20m
- Drilling available up to 40mm diameter up to 100mm thickness
- Interpolated milling up to 250mm
- Milling function for openings / notches
- Full scribing options available
- Shot blasting & Priming
- Full fabrication

PRODUCTS

- Cellular Beams
- Plate Beams
- Ultra Shallow Floor Beams
- Box Girders

FREE IN HOUSE BEAM OPTIONS

- Asymmetric
- Tapered
- Curved
- Cambered

SERVICES

- Free design and technical advisory service
- Regional engineers covering the UK, Ireland & Mainland Europe
- Free analysis & design software
- CPD seminars

www.kloecknerwestok.com
SAWING

Every saw at Kloeckner Metals UK has a fully programmable, integrated touch screen PC control and is able to accept cutting data manually in DSTV files, DSTV + files or in Microsoft Excel Format.

Capable of handling dimensional properties of between 10mm x 20mm up to 1300mm x 700mm, our processing equipment is perfectly geared to the comprehensive and exacting requirements of today’s client base.

CAPABILITIES

• Handling lengths up to 22m with a mitre cutting of up to 60 degrees
• Standard cutting tolerances outside of + / - 2mm can be made by prior agreement and the tolerances on mitre cutting are geared to a + / - 0.5 degrees variance
• From bundle cutting to single bar processing, the micro-dosage oil mist cutting lubricant ensures a virtually lubricant free cutting process, assisting in the final fabrication process

SAWING & DRILLING

DRILLING

Our long product drill line has an operational working range to encompass the following dimensional sizes and hole diameters:

<table>
<thead>
<tr>
<th>Product</th>
<th>Product min dimension mm</th>
<th>Product max dimension mm</th>
<th>Min &gt; max hole diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angle</td>
<td>80 x 65 x 10</td>
<td>250 x 250 x 8</td>
<td>8 &gt; 40</td>
</tr>
<tr>
<td>Channel</td>
<td>80 x 45</td>
<td>430 x 100</td>
<td>8 &gt; 40</td>
</tr>
<tr>
<td>Beam</td>
<td>127 x 76</td>
<td>1016 x 305</td>
<td>8 &gt; 40</td>
</tr>
<tr>
<td>Plate Beams</td>
<td>80 x 15</td>
<td>1200 x 450</td>
<td>8 &gt; 40</td>
</tr>
</tbody>
</table>

CAPABILITIES - LONG PRODUCT DRILLING

• We have the facility to hard stamp most products with bespoke identifying marks or cast numbers
• Automatically processing materials ranging in lengths from 2.2m to 21m, with a manual feed capacity of a minimum of 1.2m to a maximum 21m
• Utilising the three drilling heads available on the machine we are also able to simultaneously drill on 3 faces of the material being processed, again reducing lead times and introducing cost benefits directly to our clients
SHOT BLASTING & PAINTING

Our shot blasting & painting lines can handle plates and structural material up to 22m long, 1500mm wide and 500mm high, the maximum weight capacity is 10 tonnes. We offer a blast finish to SA2.5 in paint colours of red and grey.

Kloeckner Metals UK is fully accredited for the processing of shot blasting and painted steel to the relevant CE marking Execution Class 1 – 4.

DE-COILING

We offer a comprehensive range of light gauge de-coiling and guillotining services. Our service centre, Organically Coated Steels based in Kidderminster, offers de-coiling, slitting and blanking in Carbon and Coated Steels in gauges 0.4mm > 3.0mm.

<table>
<thead>
<tr>
<th>CAPABILITIES</th>
<th>Pre-painted, Aluzinc &amp; Coated Steel</th>
<th>Coated &amp; Carbon Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master coil weight</td>
<td>2000kg &gt; 14000kg</td>
<td>4000kg &gt; 14000kg</td>
</tr>
<tr>
<td>Master coil width</td>
<td>700mm &gt; 1600mm</td>
<td>900mm &gt; 1830mm</td>
</tr>
<tr>
<td>Thickness / gauge</td>
<td>0.4mm &gt; 1.5mm</td>
<td>0.8mm &gt; 3mm</td>
</tr>
<tr>
<td>Lengths</td>
<td>400mm &gt; 4000mm</td>
<td>500mm &gt; 5000mm</td>
</tr>
<tr>
<td>Length tolerance standard</td>
<td>- 0 + 6mm</td>
<td>- 0 + 6mm</td>
</tr>
<tr>
<td>Length tolerance special</td>
<td>- / + 1mm</td>
<td>- / + 1mm</td>
</tr>
<tr>
<td>Finished pack weight</td>
<td>500kg &gt; 5000kg</td>
<td>500kg &gt; 5000kg</td>
</tr>
</tbody>
</table>

Blanking and edge trimming process requires both cutting to length and slitting to width to obtain a finished product where close tolerances are specified for finished sizes.

Slitting process for Pre-painted, Aluzinc and Coated Steel requires wide coil to be reduced to narrow width coils where close tolerances are required.

Recoiling process for Pre-painted, Aluzinc and Coated Steels enables large coils to be reduced in weight suitable for customers own machine capacities.

Protective film application for Pre-painted (and some Coated Products) – a strippable film can be applied to the top surface of the material to protect the product during the customer’s manufacturing process which can then be removed.
QUALITY, HEALTH & SAFETY AND ENVIRONMENT (QHSE)

We take Quality and Health & Safety seriously and you can be assured that excellence is at the heart of our mission statement. The team at Kloeckner are aware of the importance of maintaining company certifications and are committed to ensuring our management systems and processes are up to the highest standards with regards to Quality, Health & Safety and Environment. Our key Quality, Health & Safety and Environment certifications include:

ISO 9001:2015
National Highway Sector Scheme 3B (NHSS3B)
ISO 14001:2015
ISO 45001:2018
BES 6001
EC Certificate FPC (Factory Production Control) to BS EN 1090-1: 2009 up to Execution Class 4
Certificate of Constancy of Performance to EN 12899-1: 2007

As part of our Quality structure we focus strongly on product approval, sourcing products only from ISO and CE approved suppliers, strengthening our supply chain structure as well as compliance. Key features include a strong ISO culture, customer retention, contract review (attention to detail) and our overall responsibility for quality.

CE MARKING

Kloeckner Metals UK would like to assure all our customers that we are fully compliant to CE regulation especially with regards to CE marking of products. We are governed by the requirements of the Construction Products Regulation (CPR) which add responsibility to both importer and distributor who must also ensure that the manufacturer has undertaken fully all that is required. Construction Products Regulation govern a whole range of products sold into permanent constructions. The CE mark indicates that a product complies with the 'essential requirements' of the appropriate part of the Construction Products Regulation.

The list of products is long and complex, many of Kloeckner Metals UK core products and processes are included. Processes that are mandatory include: shot blasting; painting; drilling; Oxy, plasma & laser profiling and whether we do the processes ourselves, or sub-contract it, we are ultimately responsible as the seller.

Many of Kloeckner Metals UK’s products used in construction are covered by CE marking. For the products we buy from CE certified mills our operations department must ensure that we maintain full traceability from receipt through to dispatch. This includes ensuring that the test cert is complete and includes the suppliers CE mark.