ASD

INNOVATIVE VALUE-ADDED SERVICE

Metal Solutions of Tomorrow

At ASD, we strive to grow partnerships with our customers by developing innovative value-added services. We continuously invest in know-how and processing technologies, so we can deliver cost-efficient metal solutions and **high-quality steel products**.

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TUBE LASER

Located in the heart of the Midlands, ASD's laser processing centre of excellence boasts an impressive portfolio of state-of-the-art 3D laser cutting machines. Extensive processing capabilities in combination with our talented CAD team allow us to offer complete in-house solutions, no matter how large, small or complex your cutting requirements.

OUR EXPERTISE & CAPABILITIES

Provision of kit of parts ready for assembly

Capacity to process large volumes of project work with close tolerances and complex geometries

Ability to service contractual work and repetitive requirements

Access to skills and expertise

Flexible lead times

Processing Hollow Sections, Tubular Products, Beams, Columns, Split Tees, Angles and Channels

Ability to process parts up to 355mm in diameter and weights up to 100kg/m

Ability to laser cut 20mm thick mild steel and weld prep 16mm thick mild steel material up to 45 degrees



When it comes to fabrication and assembly of mechanical sections, 3D cutting not only brings significant processing and economic benefits but also allows us to thrill our customers by delivering **sustainable innovative solutions**.

LT14 JUMBO LASER CAPABILITIES								
Max Round mm	Max Rectangle mm	Max Square mm	Channel mm	Equal Angle mm	Unequal Angle mm	Universal Column mm	Universal Beam mm	ln ∕ Out m
355	300 x 200	250 x 250	300 x 100	200 X 200	200 x 150	254 x 254	305 x 165	15.5

LT8 & LT722D LASER CAPABILITIES

	Max Round mm	Max Rectangle mm	Max Square mm	Channel mm	Angle mm	Max Steel Wall Thickness mm	Max Stainless Wall Thickness mm	Max Aluminium Wall Thickness mm
LT8	220	200 x 100	200	200 x 75 x 23	200 x 200	12	6	4
LT722D	152.4	120 x 60	100	N/A	N/A	6	4	N/A

LASER-ARRAY AUTOMATED INSPECTION LINE

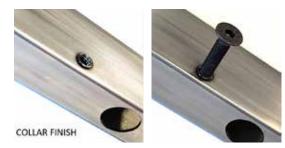
To ensure dimensional accuracy on critical laser-cut components, we have recently invested in a bespoke laser-array automated inspection line. This new non-contact laser measurement system allows us to offer our customers heightened quality assurance by providing measurement capabilities for length, section dimensions, straightness, twist and cut features – for sections up to 200 x 100 x 9m.

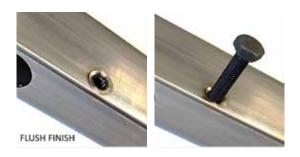


FLOWDRILL

At ASD, we offer a complementary Flowdrill service to tube laser parts. The Flowdrill uses high rotational speed and high pressure to make holes in the desired material. The process is beneficial when there is a requirement for a thread in thin material without the use of thread inserts.

Using a Flowdrill process, the material is not lost but forms a sleeve around the hole which makes the sleeve's length up to three times the original thickness. We can offer a collar or a plane surface finish.





FLAT BED LASER

ASD's flat bed laser portfolio includes the latest technology for both fibre and CO₂ processing. We can carry out large volume and small batch profiling and can process ferrous and non-ferrous materials.

Fibre & CO₂ Lasers

- Max cut length 4000mm (max bed length 4050mm)
- Max cut width 2000mm (max bed width 2025mm)
- Max bed plate weight 1600kg

CAPABILITIES

Material-designated machines (to eradicate material cross-contamination)

Cutting Carbon, Stainless and Galvanised Steel, Aluminium and COR-TEN $\ensuremath{\mathbb{R}}$

Automation/efficiency (all machines have OEM loading systems)

UKCA/CE marking to Execution Class 4

Cut quality (thermal best in class)

Cut tolerances (+/- 0.25mm)

Max cutting thickness 25mm on Stainless and 20mm on Mild Steel

Eradication of secondary processes (elimination of drilling/machining)



PLANAR MEASURING SYSTEM

The Planar measuring system allows us to increase accuracy and ensures that parts are manufactured to the correct specification. It enables ASD 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 transferred into the component through the cutting jet, resulting in a no-heat-affected zone (HAZ) and no metallurgical changes in the processed material.

Water jet cutting allows efficient production, high component accuracy and excellent surface quality at the cut edge. What's more, with water jet cutting, no pollutants are created during the cutting process, so it is environmentally friendly, too.



CAPABILITIES

Cutting up to 200mm thick material

Cutting Stainless Steel, Duplex and Super Duplex materials

Max length 4010mm

Max width 2010mm

Cutting tolerance +/- 0.25mm

Twin heads on one machine allow us to cut 2 parts simultaneously

Shorter lead times due to Ultra-High Pressure 6200 Bar cutting pressure, which allows us to increase the cutting speed, whilst maintaining a high-quality cut

Advanced CNC cutting control allows a high quality of cut to be maintained even when changing directions, allowing complex parts to be cut accurately. The part finish can be configured to customer's requirements from a rough finish all the way through to ultra-fine.

FORMING/BENDING

We can offer the precision bending/pressing of materials into bespoke three-dimensional shapes. The Bystronic Xpert press brake has the capability of delivering first-class bending results on parts up to 4100mm long, combined with a maximum of 320 tonnes of pressure. To prevent cross-contamination, we use dedicated tooling for Mild and Stainless Steel.





Our **profiling centre of excellence** houses an extensive range of profiling, drilling and bevelling equipment.

PROFILING

OUR EXPERTISE & CAPABILITIES

Ability to process large area plates up to 14m x 3.2m in a number of grades, ranging from structural steels through to pressure vessel, boiler and offshore grades

Volume and small batch profiling

All profiles fully fettled and shrink wrapped

Straight-line burning facility

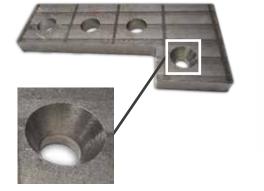
Edge bevelling & weld preparation

Access to technical advice from our experienced profiling team

Material traceability & Quality Assurance certifications

PLASMA PROFILE CUTTING	OXY-FUEL PROFILE CUTTING	DRILLING
UKCA/CE marking to Execution Class 4	UKCA/CE marking to Execution Class 4	Plates
Full cutting capability up to 3000mm wide	Standard tolerance +/- 3mm, tighter tolerances available on application	Bed size: 3100mm x 6100mm
Full cutting capability up to 13000mm in length	Individual piece weight of 18 tonnes	Up to 52mm holes
Hi-Def cutting up to 80mm thick	Multiple head cutting for maximum efficiency	Deep hole, chip breaking cycle
Standard tolerance +/- 2mm, tighter tolerances available on application	Cutting capability up to 180mm	OTHER PROCESSES
Full plate etching available across all machines	Full cutting capability up to 13000mm in length	Tapping M30
Bolt hole technology	Full cutting capability up to 3200mm wide	Countersinking
Plasma bevel cutting		Milling
		Chamfering







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 the paint colours of red and grey.

We are also fully accredited for the processing of shot blasting & painting steel to the relevant UKCA/CE marking Execution Class 1–4.



DE-COILING, SLITTING & GUILLOTINING

ASD offers a comprehensive range of light gauge de-coiling, slitting and guillotining services.



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CAPABILITIES			
	DE-COILING	DE-COILING TO LENGTH	SLITTING & BLANKING
Products	Pre-Painted Steel Galvanised Steel Aluzinc Magnelis Laminates	Aluminium	Pre-Painted Steel Magnelis Aluzinc Laminates
Max Gauge	2.5mm	3.0mm	1.5mm
Min Gauge	0.4mm	0.7mm	0.4mm
Max Length	4600mm	4600mm	N/A
Min Length	300mm	300mm	N/A
Min Width	400mm	600mm	75mm
Max Finished Pack/ Coil	5 tonnes	4 tonnes	6 tonnes
Film Applicator	Yes	Yes	Yes
Additional Services	Pallet Turner	Pallet Turner	Coil Inverting

SAWING

To keep up with the demand from our customers, our highly innovative steel band saws offer high cutting performance and deliver outstanding cutting results.

CAPABILITIES

Sawing capabilities of sections up to 1300mm x 700mm

Handling lengths up to 22m with a mitre cutting of up to 60 degrees

The typical cutting tolerance that can be achieved is +/- 2mm on the length and +/- 0.5 degrees on the mitre cut - tighter cutting tolerances may be achieved by prior agreement

Ability to saw heavy-duty steel profiles, single beams, bundles or layers





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

CAPABILITIES			
Products	Product min dimensions mm	Product max dimensions mm	Min > max hole diameter
Angles	80 x 65 x 10	250 x 250 x 8	8 > 40
Channels	80 x 45	430 × 100	8 > 40
Beams	127 × 76	1016 × 305	8 > 40
Plate Beams	80 x 15	1200 x 450	8 > 40

Hard stamping 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 of 21m

Ability to simultaneously drill on 3 faces of the processed material, reducing lead times and introducing cost benefits directly to our customers

CNC ROUTING

CAPABILITIES

Ability to precision cut, groove, chamfer, channel and engrave various materials, including Aluminium, Composites and plastics 5mm thick up to 100mm

Folding and bending Composite and Aluminium panels

Cutting bespoke shapes and sign panels in one-offs or in high volumes

2D flat-cut letters, logos and other shapes



SECTION BENDING

From tubes, flats, rounds, solid rounds, solid squares, rolled steel angles, tee sections and channels, we offer section bending and can manipulate Mild Steel, Stainless Steel or Aluminium materials to your specific requirement.

CAPABILITIES

Solid flat-sided sections up to 220mm x 50mm

Solid diameters up to 90mm

Hollow sections up to 150mm x 50mm x 5mm

Tube diameters up to 141mm x 6mm or 168mm x 3.4mm



PUNCH & SHEAR

To complement our extensive profiling capabilities, we also offer customers a high-quality punch and shear processing service. Using a top-of-the-line fittings machine, we can process flat and angle steel in various thicknesses to deliver parts for construction applications.

CAPABILITIES

Processing flat steel from 50mm × 5mm up to 500mm × 25mm and angle steel from 50mm x 50mm x 5mm up to 160mm x 160mm x 12mm

Producing brackets, gussets, rectangles and squares

Ability to provide the de-burring of individual punched holes in plates



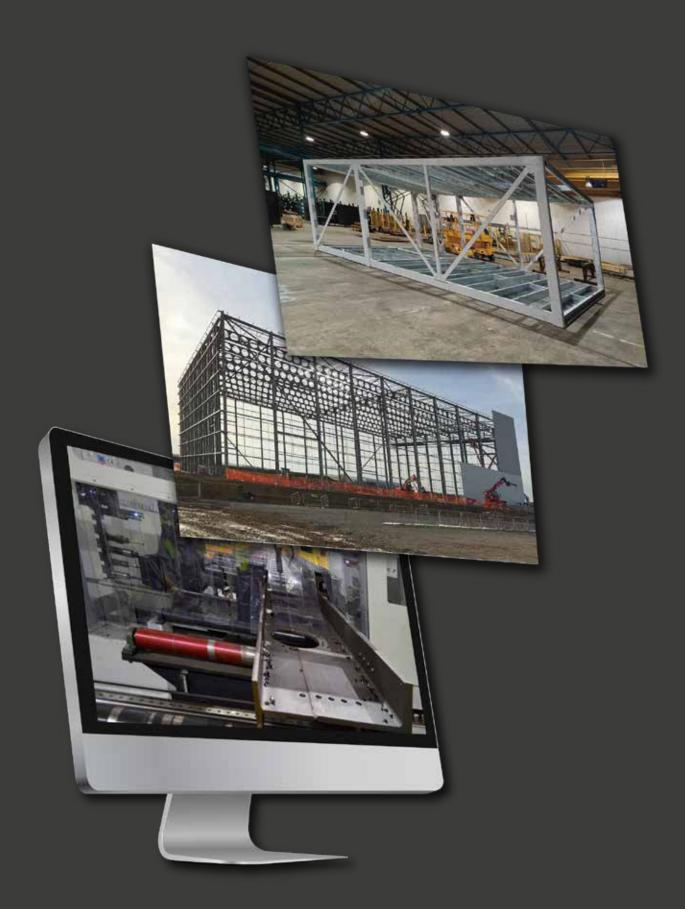


TOTAL METALS MANAGEMENT

Total Metals Management is a unique value proposition offered to our customers operating in specialist sectors. Companies that operate in high-tech sectors demand a first-class service and quality standard as well as purchasing metals on a project-byproject basis.

Total Metals Management offers an array of benefits and is an ideal solution to supply chain challenges.





ASD Westok specialises in EXC4 steelwork fabrication, including **Westok ribboncut cellbeams, plate and box girders, cellular UBs, volumetric units for the modular sector, highway and transfer beams, trusses, and heavy industrial steelwork**, using S355, S460, weathering steel, steel re-use, and lightweight low-carbon value engineering design solutions.

ASD WESTOK

ASD Westok is a specialist structural steelwork contractor offering a variety of products and services to the construction industry. Westok offers UKCA and CE mark fabrication to EXC-4, supported by quality systems accredited to ISO 9001, 14001, BES 6001, and the Register of Qualified Steelwork Contractors Scheme (RQSC) for bridgeworks and building works, as well as National Highways Sector Scheme NHSS 3B and 20.

Westok has considerable experience in the value engineering design and fabrication of projects across a variety of sectors.

CAPABILITIES UKCA / CE marked to EXC-4 S355, S460, Weathering Steel, Steel re-use Waterbed profiling up to 23m: any rolled section / plate 100mm + FRC robot profiling and processing up to 20m Automated processing (saw, drill, notch, scribe) up to 20m including cambered and asymmetric sections Automated plate and box girder manufacture up to 22m long / 2m deep Semi-automated / manual plate and box girder manufacture to any length / depth

Services

- Free design and technical advisory service
- Structural calculations, vibration and embodied carbon assessments
- One stop shop" approach to projects: material procurement, programme, design, detailing, sustainability, buildability, painting and galvanising, transportation
- Overlong carcass, cambered, curved, tapered, processed, full fabrication, painted and delivered to site



Products

- Cellular beams: Westok ribbon-cut, Plate, Profiled sections
- Modular sector component pieces to fully fabricated volumetric units
- Trusses, heavy industrial steelwork, box girders, crane grillages
- Highway and pedestrian bridges, transfer beams, plunge columns
- Traditional structural steelwork fabrication

ASD

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