ASD

INNOVATIVE
VALUE-ADDED SERVICES

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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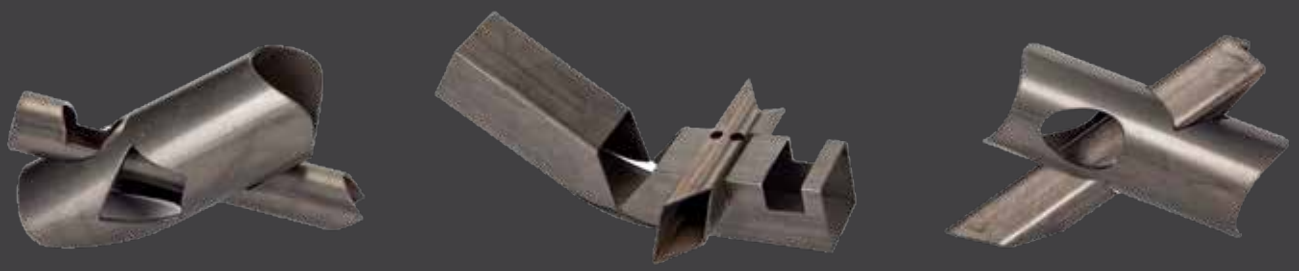
TUBE LASER

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, combined with our talented CAD team, allow us to offer complete in-house solutions, no matter how large, small or complex your cutting requirements are.

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
Portable CMM 7-axis articulated scanning system and high-precision laser scanner for the 3D measurement of parts



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	In / 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 CO_2 processing. We can carry out large volume and small batch profiling and can process ferrous and non-ferrous materials.

Fibre & CO_2 Lasers

- Max cut length 6000mm
- Max cut width 2000mm

CAPABILITIES
Material-designated machines (to eradicate material cross-contamination)
Cutting Carbon, Stainless and Galvanised Steel, Aluminium and COR-TEN®
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)
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 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.

AUTOMATION LINE

ASD's new automation line, featuring a state-of-the-art coping robot, two shot blasters, a painting line, drilling, and two sawing lines, is set to transform steel processing for our customers in the UK.

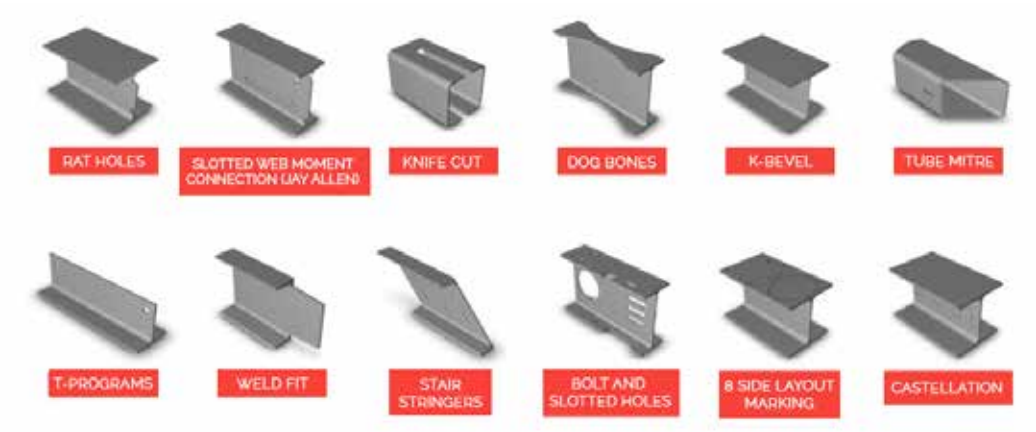
This cutting-edge technology allows us to address key challenges in the construction industry, such as:

- Removal of manual, labour-intensive processes
- Skills shortages
- Production bottlenecks
- The need to eliminate human errors

Automating tasks such as coping, shot blasting, painting, sawing, or drilling delivers faster, more precise, and high-quality results, giving customers a competitive edge while **streamlining their operations and boosting productivity.**

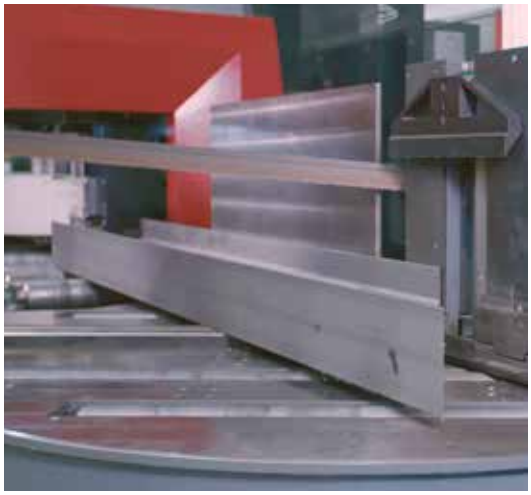
COPING ROBOT

OUR EXPERTISE & CAPABILITIES
Ability to automate 8-side layout marking with precision
Gas / plasma cutting; thicknesses from 3mm to 80mm / lengths from 1900mm to 20200mm / heights from 10mm to 460mm
Cutting tolerances of +/- 2mm
Producing notches / copes, bolt holes, flange mitres, bevels, weld preparation, and layout marking all in one
Ability to deliver consistent, repeatable results with minimal deviation, essential for maintaining quality across large projects
Capacity to efficiently process large volumes of work with complex geometries
Delivering fully prepared kits of parts ready for the next step in customers' fabrication processes



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 1130mm x 500mm
Handling lengths from 45mm up to 20200mm 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

SHOT BLASTING & PAINTING

Our shot blasting & painting lines can handle plates and structural material up to 20200mm 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.

DRILLING

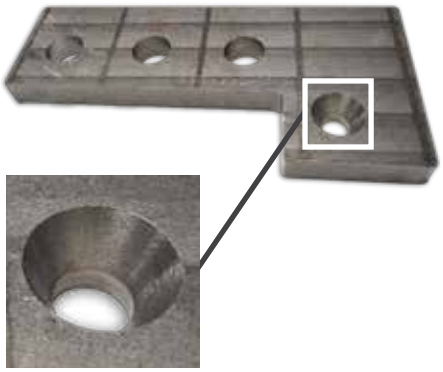
Our long product drill line has an operational working range to encompass the following dimensional sizes and hole diameters:

CAPABILITIES			
Products	**Product min dimensions mm**	**Product max dimensions mm**	**Min > max hole diameter**
Angles	80 x 65 x 10	250 x 250	5 > 40
Channels	80 x 45	430 x 100	5 > 40
Beams	127 x 76	1016 x 305	5 > 40
Part marking / stamping most products with bespoke identifying marks or cast numbers			
Automatically processing materials ranging in lengths from 2800mm up to 20200mm, with a manual feed capacity of a minimum of 45mm to a maximum of 20200mm			
Ability to simultaneously drill on 3 faces of the processed material, reducing lead times and introducing cost benefits directly to our customers			
Ability to countersink, tap and thread holes			

PROFILING

OUR EXPERTISE & CAPABILITIES
Ability to process large area plates up to 14000mm x 3200mm in a number of grades, ranging from structural steels through to pressure vessel, boiler and offshore grades
Volume and small batch profiling
All profiles can be 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 14000mm 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	**OTHER PROCESSES**
Standard tolerance +/- 2mm, tighter tolerances available on application	Cutting capability up to 180mm	Tapping M12-M30
Full plate etching available across all machines	Full cutting capability up to 13000mm in length	Countersinking
Bolt hole technology	Full cutting capability up to 3200mm wide	Milling
Plasma bevel cutting		Chamfering



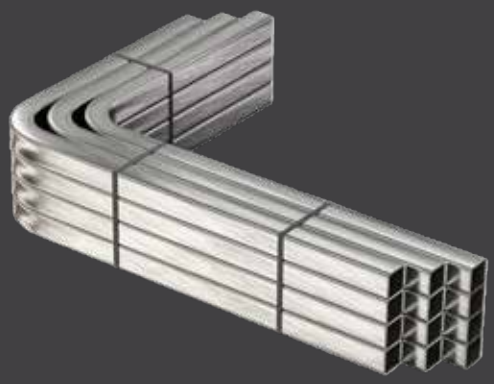
CNC ROUTING

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



DE-COILING, SLITTING & GUILLOTINING

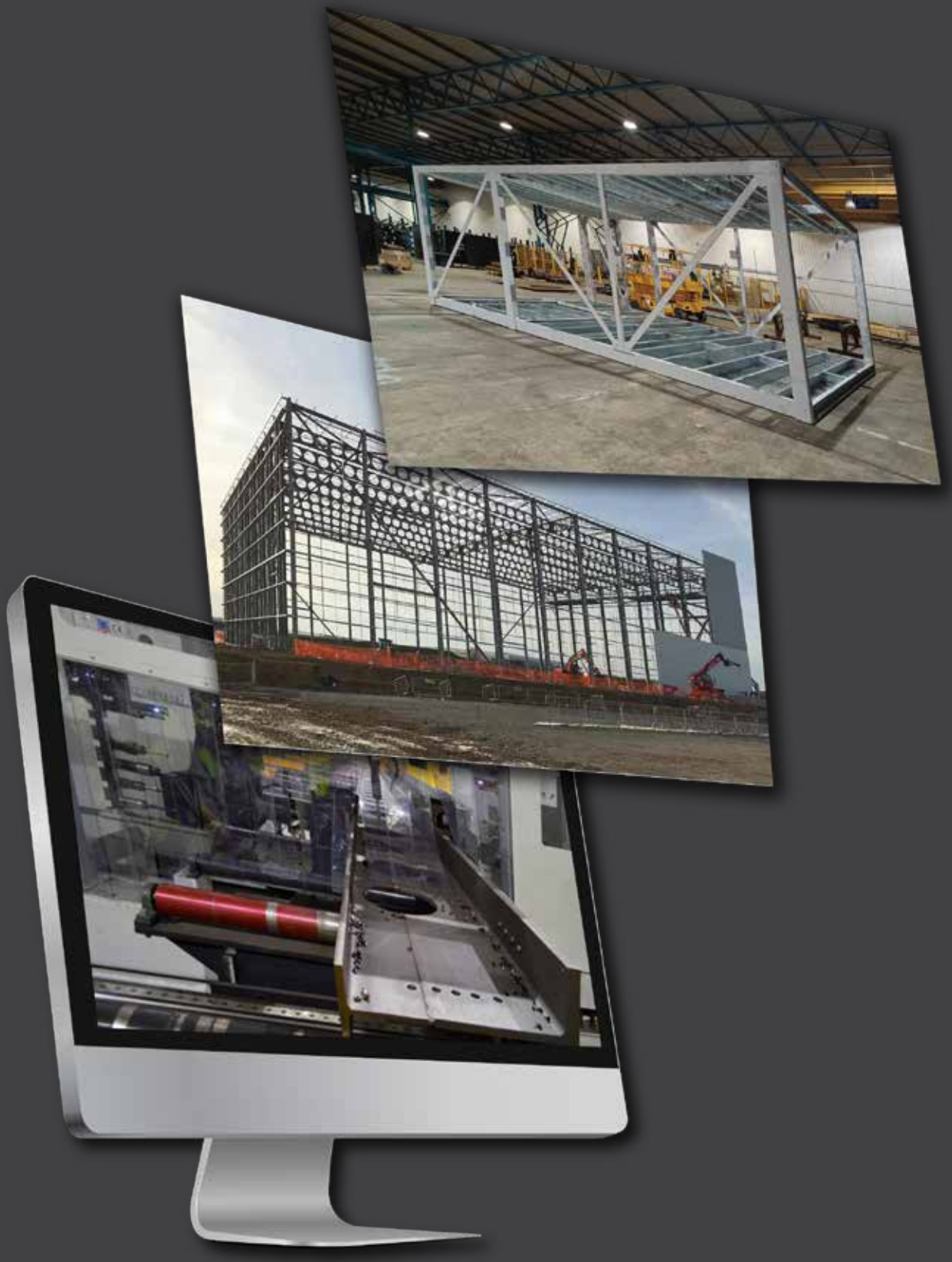
ASD offers a comprehensive range of light gauge de-coiling, slitting and guillotining services.

CAPABILITIES			
	OCS DE-COILING	SLITTING & BLANKING	BIRKENHEAD DE-COILING
Max Gauge	2.5mm	1.5mm	15mm
Min Gauge	0.4mm	0.4mm	1.6mm
Max Length	4600mm	N/A	12000mm
Min Length	300mm	N/A	500mm
Min Width	400mm	75mm	1000mm
Max Width	1500mm	1500mm	2020mm
Max Finished Pack/ Coil	5 tonnes	6 tonnes	6 tonnes
Film Applicator	Yes	Yes	N/A
Additional Services	Pallet Turner	Coil Inverting	N/A

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-by-project 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 ribbon-cut cellbeams, plate and box girders, cellular UBs, volumetric units for the modular sector, highway and transfer beams, trusses, and heavy industrial steelwork.** We use 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 EXC4, supported by quality systems accredited to ISO 9001, ISO 14001, BES 6001, and the Register of Qualified Steelwork Contractors Scheme (RQSC) for bridgeworks and building works, as well as the National Highways Sector Scheme NHSS 3B and 20.

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

CAPABILITIES
UKCA / CE marked to EXC4
S355, S460, Weathering Steel, Steel re-use
Waterbed profiling up to 23000mm: any rolled section / plate 100mm +
FRC robot profiling and processing up to 20000mm
Automated processing (saw, drill, notch, scribe) up to 20000mm including cambered and asymmetric sections
Automated plate and box girder manufacture up to 22000mm long / 2020mm deep
Semi-automated, manual cellbeams, plate and box girders, manufactured 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, and transportation
- Overlong carcass, cambered, curved, tapered, processed, fully fabricated, painted, and delivered to site

Products

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

ASD

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