

Machinery & Capabilities



CNC Turning (Lathe Machining)

Stainless UK utilises advanced CNC turning centres to manufacture precision sockets, threaded components, and specialist parts for use within fabricated assemblies or as standalone items.



The process enables accurate, repeatable production of both internal and external features, ensuring reliable fit and performance in demanding applications.

- Precision internal and external threading
- Manufacture of sockets, bosses, inserts and custom components
- High repeatability and tight tolerances for consistent production
- Suitable for both batch work and bespoke machined parts
- Components supplied ready for assembly or welding into fabrications



Drilling, Tapping & Countersinking

Stainless UK provides precision drilling, tapping and countersinking of stainless steel components and fabrications.



Our machining capabilities enable accurate hole production, threaded features and flush fixing details to meet project-specific requirements.

Key Capabilities

- Precision drilling of stainless steel plates, brackets, assemblies and structural components
- Internal thread generation in metric and imperial sizes using controlled tapping processes
- Accurate countersinking for flush-mounted bolts, screws and fixing systems
- Machining of Grade 304, Grade 316 and Duplex stainless steels
- Suitable for base plates, connection plates, masonry support systems, windposts, rebar components and bespoke fabrications

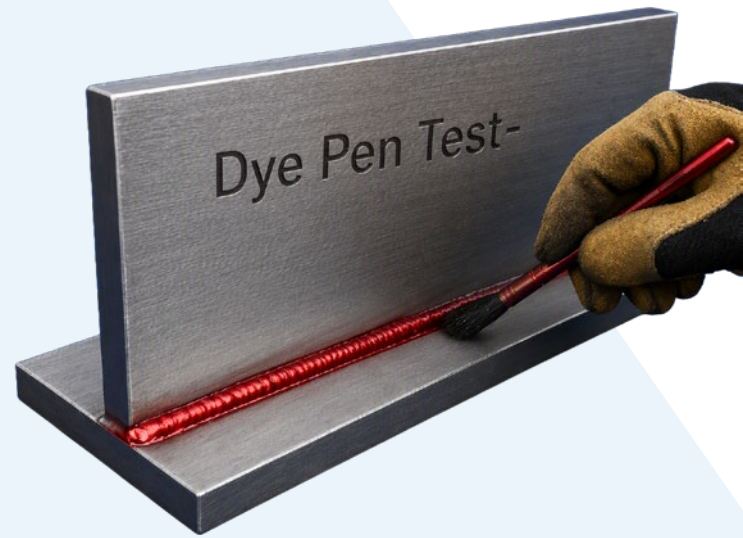


Manual Welding

Stainless UK employs highly skilled coded welders to carry out manual welding of stainless steel and mixed-material fabrications, providing flexibility for complex and bespoke components.

All welding is undertaken in accordance with approved Welding Procedure Specifications (WPS) and relevant industry standards, delivering compliant, high-integrity welds. Welders are qualified to **BS EN ISO 9606-1:2017**, ensuring competence across the welding processes undertaken.

Manual welding is ideally suited to intricate or non-repetitive fabrications where precision and adaptability are required.



- MIG and TIG welding of stainless steel, duplex, and mild steel
- Suitable for fillet, butt, and positional welds
- Welding performed to approved WPS documentation
- Flexible solution for bespoke fabrications and complex assemblies

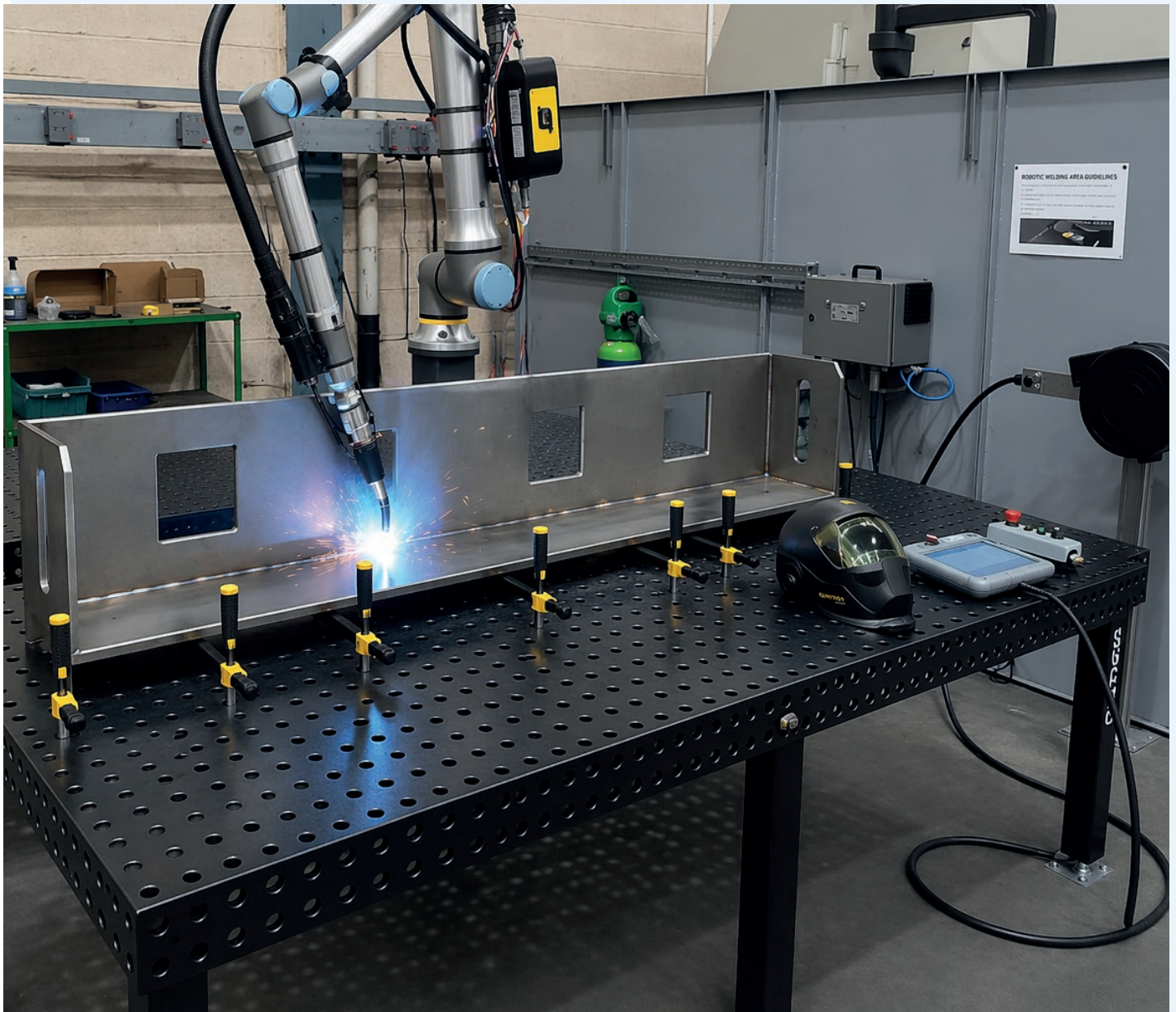


Robotic Welding (Cobot)

Stainless UK operates a collaborative robotic welding system, enabling consistent, high-quality welds with improved efficiency and repeatability.

The cobot system is ideally suited to both batch and repeat production, while maintaining flexibility for varied fabrication requirements.

- Consistent weld quality and repeatability
- Increased productivity and reduced lead times

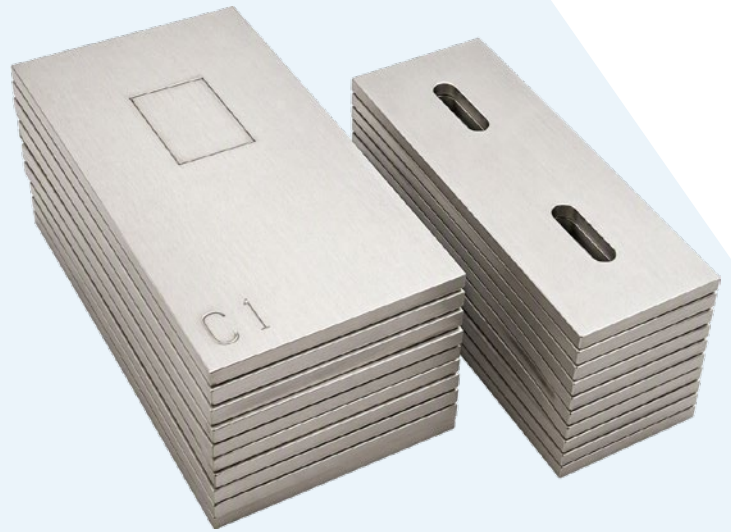


CNC Laser Cutting

Stainless offer a cut to size service on all plate and sheet products.

With two high-performance laser cutting machines, Stainless UK can support large-scale projects where reduced lead times are critical.

- 10 kW fibre laser – maximum working area 3,000 x 1,500 mm
- 15 kW fibre laser – maximum working area 4,000 x 2,000 mm
- Maximum cutting capacity: 30 mm stainless steel



Cold Formed, Pressed Angles & Channels

Stainless Uk are able to manufacture Cold Formed / Pressed Angle and Channels made to order or non-standard sizes.

We operate a range of modern CNC press brakes, enabling accurate and repeatable forming of sheet and plate.

- Maximum capacity: 600 tonnes
- Maximum length: 4,000 mm
- Suitable for stainless steel up to 25 mm thick (dependent on bend length)
- Capability to bend 15 mm stainless steel across the full 4,000 mm length



Band Sawing

Stainless UK offer precision CNC bandsaw cutting of stainless steel bars and sections, providing accurate straight and mitre cuts for a wide range of sizes and applications.



Cutting Capacities

Fully Automatic Band Saw			
Cutting Angle	Round (mm)	Square (mm)	Flat / Rectangular (mm)
90°	258	258	325 × 180
45° Right	210	195	215 × 100
45° Left	180	165	235 × 80
30° Right	125	100	135 × 100

Semi Automatic Band Saw			
Cutting Angle	Round (mm)	Square (mm)	Flat / Rectangular (mm)
90°	250	220	280 × 220
45° Left	230	200	220 × 200
45° Right	200	170	200 × 140
60° Left	120	80	140 × 80



Thread Rolling

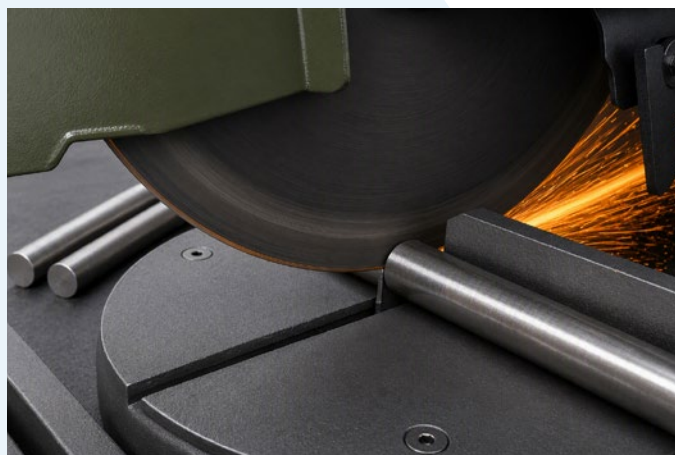
Stainless UK offer precision thread rolling of stainless steel bars, producing fully threaded or end threaded components with high strength and consistent dimensional accuracy.

- Thread rolling is a cold forming process producing improved surface finish and material strength
- Capacity depends on material grade, pitch and thread form
- Fully threaded bars: M12 to M100 (continuous rolled threads via through feed)
- End threaded bars: M12 to M100 (in feed rolling to defined thread lengths)



Radiac Bar Cutting

Stainless UK offer high speed Radiac abrasive cutting of stainless steel bar, providing efficient, repeatable cutting across a wide diameter range.



- Suitable for cutting stainless steel bar, solid round and sections
- Capacity dependent on material grade, section profile and cut length
- Typically used for high volume, repeat cutting of bar stock prior to secondary operations (e.g. thread rolling, machining)

Technical Information

Process Type	Abrasive Disc Cutting
Bar Diameter Range	5 mm – 80 mm



Hydraulic Bar Shearing

Stainless UK offer hydraulic bar shearing of stainless steel, providing efficient high capacity cutting of multiple bars and larger diameters.

- Hydraulic rebar shear designed for cutting multiple bars per stroke
- Typically used for high volume cut to length bar preparation



Technical Information

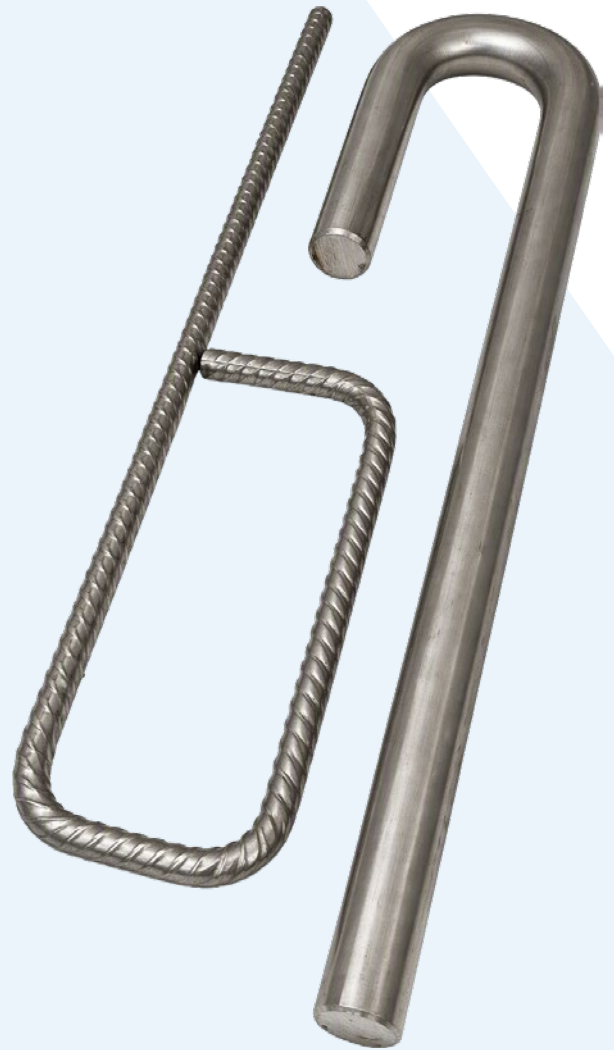
Process Type	Hydraulic Bar Shearing
Max Single Bar Capacity	up to 30 mm diameter
Typical Material	Reinforcing steel



Bar Bending

Stainless UK offer precision bar bending of stainless steel, producing accurate, repeatable bends for a wide range of diameters and formed components.

- Suitable for production bending of straight bar into defined shapes and angles
- Capacity dependent on material grade and bend configuration
- Continuous angle control with programmable settings for repeat production



Technical Information

Process Type	Rotary Bar Bending
Max Bending Diameter	approx. 40 mm
Typical Material	Reinforcing steel / bar material



Certification, Welding & Quality

Stainless UK Ltd operates a BS EN ISO 9001:2015 Quality Management System certified by CARES, supporting consistent quality, full traceability, compliance and continual improvement.

- CARES Product Conformity Certification for processing BS 6744:2023 stainless steel reinforcement to BS 8666:2020.
- Fabrication controls managed in accordance with BS EN 1090 up to Execution Class 2 (EXC2).
- MAG welding process 135 and TIG welding process 141.
- Qualified welding procedures, coded welders, WPS, WPQR and competence verification.
- Robotic MAG welding (Process 135) is included within the current SCCS EN 1090 welding certification scope and is controlled through qualified procedures, competence requirements, welding coordination and inspection arrangements.
- **Authorised welding base materials:** stainless steels 1.4301, 1.4307, 1.4401 and 1.4404 to BS EN 10088-2; duplex stainless steel 1.4462; mild steel up to and including S355 J2 to BS EN 10025-2; and Grade 500C reinforcing steel to BS 4449.
- Quality, environmental, health & safety and business system risks managed through documented controls, audits, training, corrective action and continual improvement.

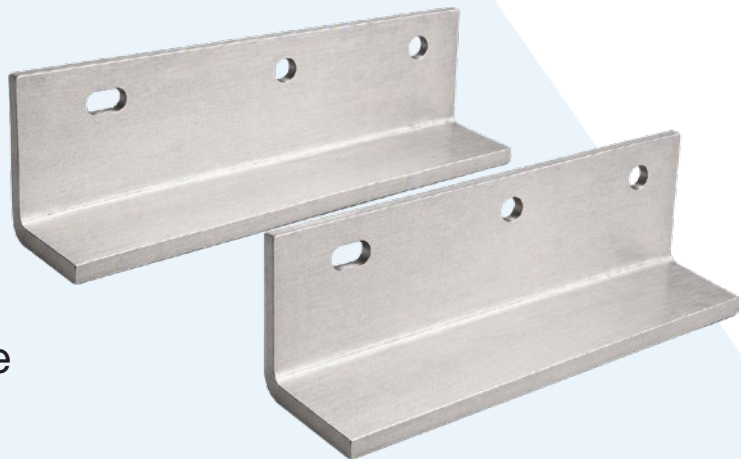


Product & Product Use



Heavy Angle and Channel Sections – Applications

Stainless steel heavy angle (cold formed L sections and channel sections) provides rigid support, edge protection, and load transfer in civil, marine, and building environments.



Key Applications

Bridge & Infrastructure

- Bridge edge trim and expansion joint support angles
- Ballast retainers and deck edge protection
- Shear connectors and secondary support members

Marine & Coastal

- Sea wall edge protection and coping support
- Jetty and quay structural framing
- Fender mounting rails and backing structures

Hydraulic Structures

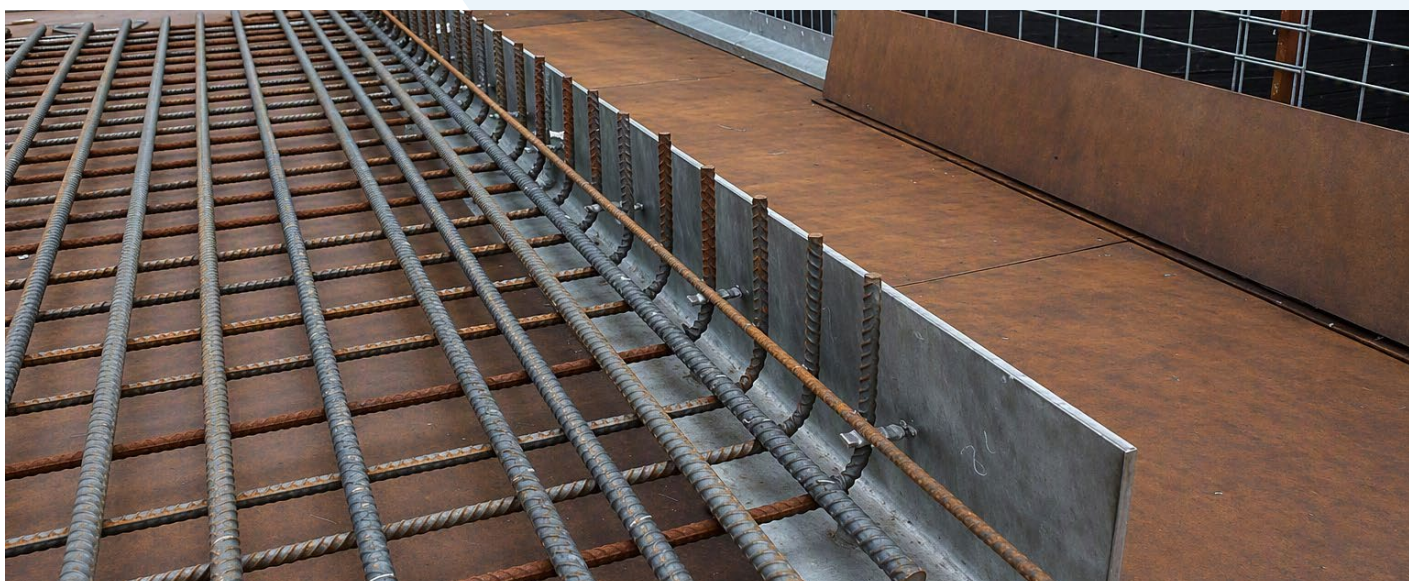
- Sluice gate and lock guide rails
- Weir plate support angles
- Water control system framing

Building & Façade

- Masonry support and shelf angles
- GRC cladding bracketry and support rails
- Precast concrete seating and support angles
- Façade support framing for curtain walling

Civil & Groundworks

- Trench edge protection and pit framing
- Retaining structure support angles
- Foundation seating and load spreading



Welded Fabrications

– Applications

Heavy welded fabrications are custom-engineered assemblies produced from thick plate, sections for high-load, critical infrastructure.

Key Applications

Bridge & Highway Infrastructure

- Box girders and plate girders
- Bridge diaphragms and cross-frames
- Pylon and tower sections
- Bridge structural components and sub-assemblies

Marine & Coastal Engineering

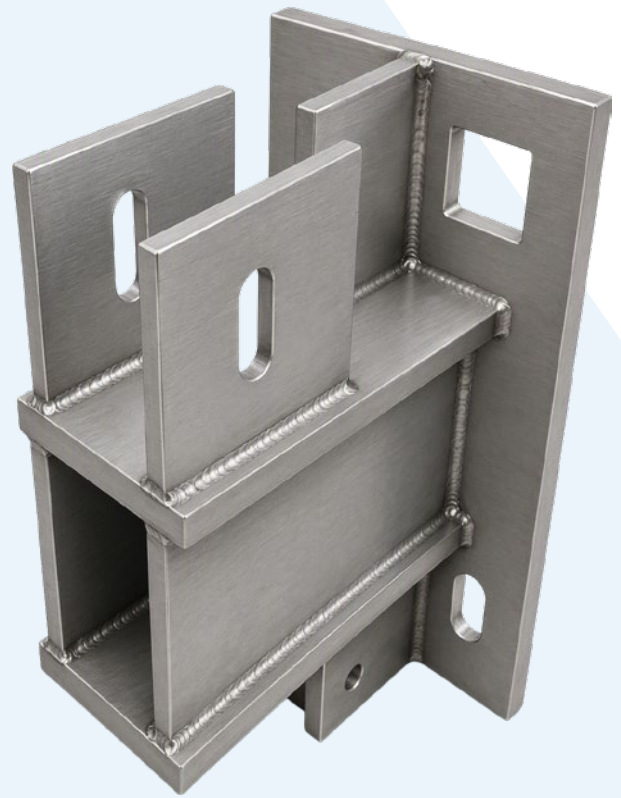
- Quays, jetties and harbour structures
- Sea walls and coastal defence systems
- Port upgrades and dock infrastructure
- Sea wall and jetty fender mounting systems
- Monopiles and jacket foundations
- Caissons and cofferdams

Hydraulic & Water Control

- Sluice gates and radial gates
- Lock gates and gate frames
- Flood barriers and dam structures
- Weir plates and flow control systems

Building & Structural Components

- Heavy structural frames and support fabrications
- GRC bracketry and façade support assemblies
- Precast concrete bracketry and structural fixings
- Balcony, walkway and access platform structures
- Stair and landing structural supports
- Plant and equipment support frames



Retaining & Foundations

- Retaining structures and excavation bracing
- Walers, struts and heavy support frames
- Pile caps, piling shoes and load transfer units

Tunnelling & Mining

- TBM structural components and shields
- Tunnel portals and canopy systems

Bearing Plates / Anchor Plates / Cut Plate – Applications

Bearing, anchor and base plates for structural, bridge, marine, façade applications, supporting load distribution, tie bars, deck connections and precast fixings in stainless steel.



Key Applications

Structural & Civil Engineering

- Bearing plates and load distribution plates
- Anchor plates for tie bar and anchoring systems
- Base plates for columns and structural supports

Bridge & Infrastructure

- Deck connection plates and splice plates
- Expansion joint anchorage plates
- Parapet and barrier fixing plates

Marine & Coastal

- Fender mounting plates and fixing interfaces
- Anchor and mooring connection plates
- Corrosion-resistant fixing plates in tidal zones

Hydraulic Structures

- Gate connection plates and hinge supports
- Embed plates for sluice and lock systems
- Fixing plates for weir and flood defence systems

Building & Façade

- Cast-in plates for precast concrete systems
- Façade fixing plates for curtain walling and cladding
- GRC and precast connection plates
- Edge protection and interface plates

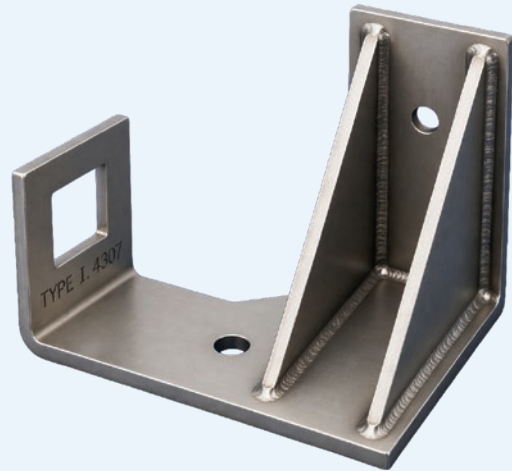
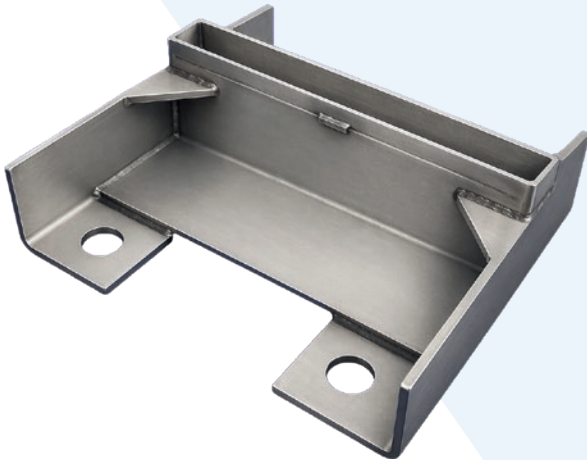
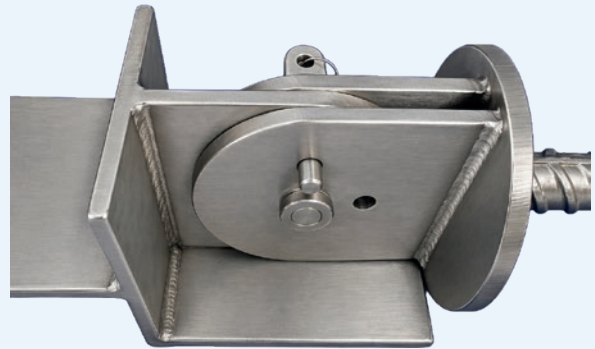


Bespoke Fabrications

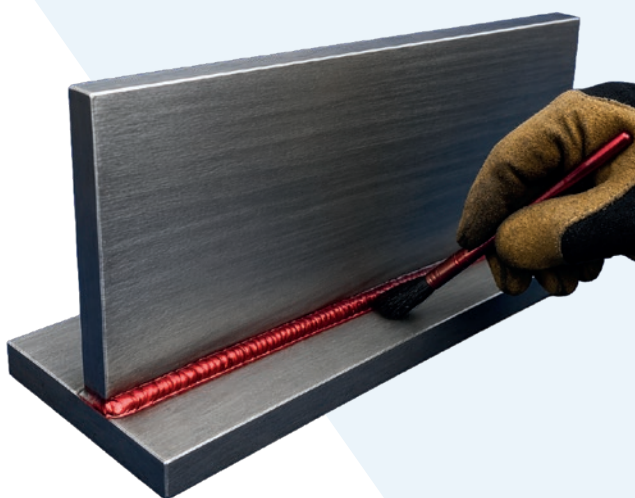
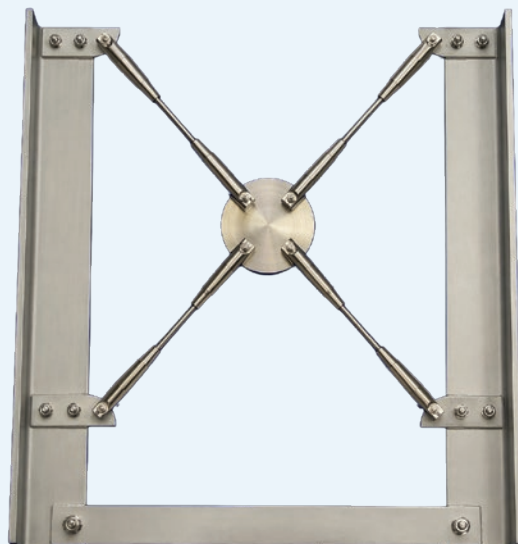


Bespoke Fabrications

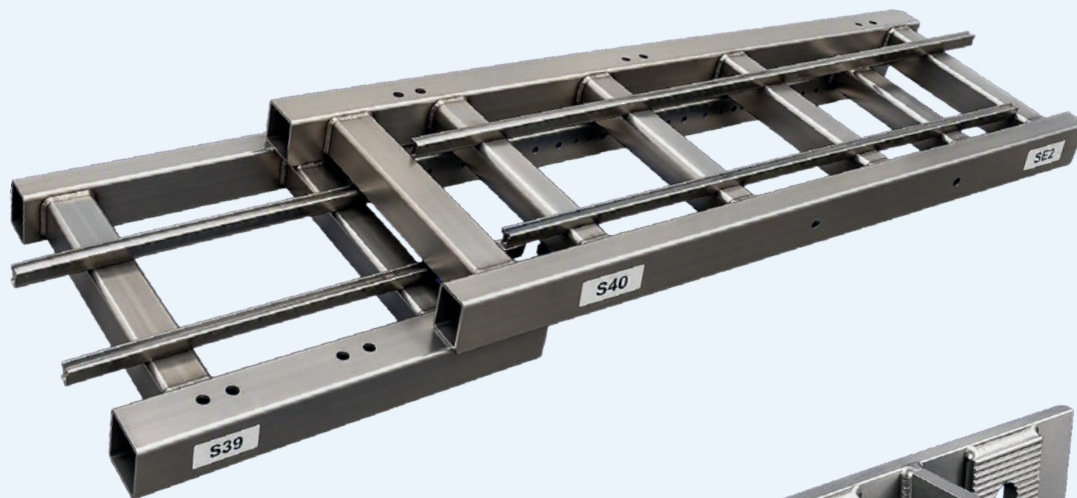
Stainless UK also offers bespoke fabrications, engineering custom stainless steel plates, brackets and fixings to exact project specifications. From one-off prototypes to complex structural components, each piece is precision-cut, formed and finished to suit demanding structural, marine and architectural applications.



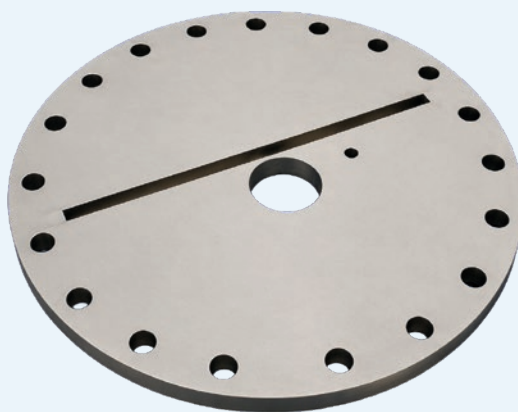
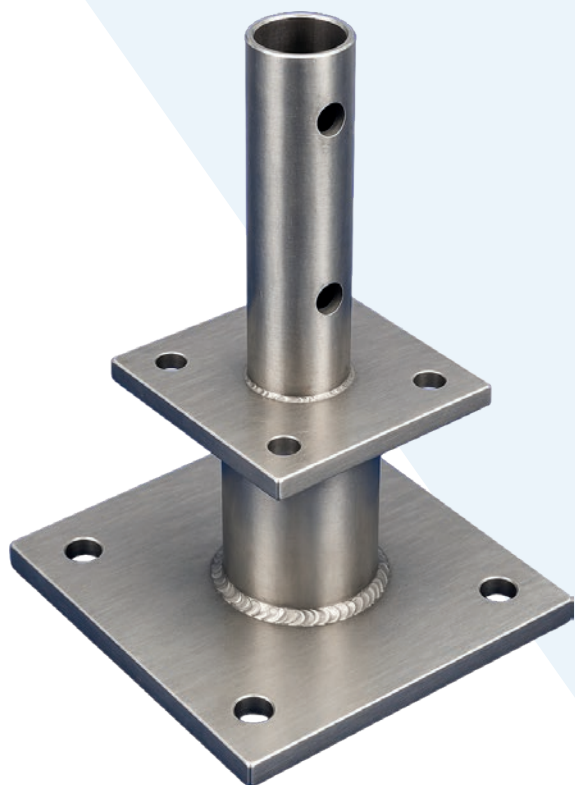
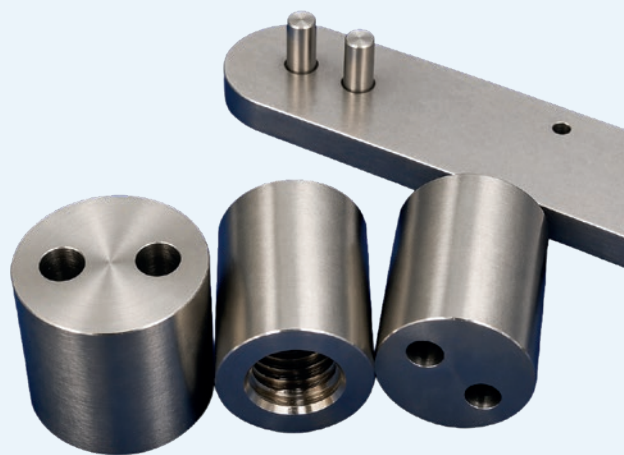
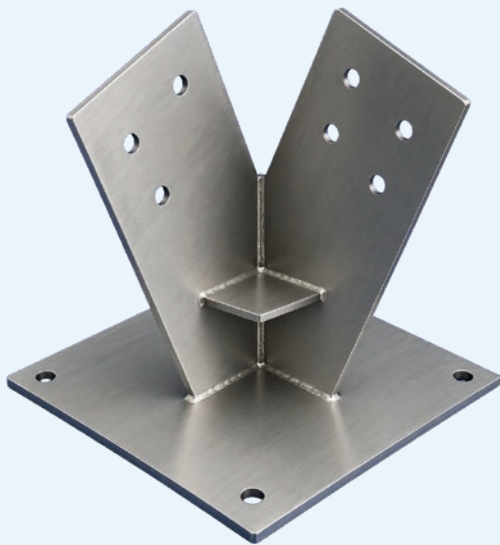
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