



FABRICATIONSTAR

METAL FABRICATION • GLOBAL SOURCING & UK-BASED PROJECT SUPPORT

Your Metal Parts. DONE. From Drawing to Delivery.

We find the right manufacturing partner for your project and coordinate production, quality checks and delivery — with one dedicated point of contact.

CAPABILITIES CATALOGUE

About FabricationStar

Your UK-Based Partner for Metal Fabrication Sourcing

FabricationStar is the specialist metal fabrication sourcing brand of IDAS International, a UK-based business development and trading consultancy. We help businesses turn their metalworking requirements into practical, competitively priced manufacturing solutions by connecting them with suitable production partners in the UK, Türkiye and other international markets.



Manufacturing Expertise Through Our Partner Network

Our services are delivered through independent manufacturing partners. We bring together the capabilities needed for each project, from laser cutting, forming and welding to machining, casting, surface finishing and assembly. We also coordinate access to design support, prototyping and product development, helping customers move from an initial requirement to a finished component or product.

This flexible approach allows us to explore different suppliers and production routes according to your drawings, specifications, order quantities and delivery needs.



Practical Sourcing. Commercial Focus.

Finding an economical solution means considering the complete project. Material choices, manufacturing methods, finishing, packaging and transport all influence the final cost.

We work to understand your priorities, source suitable manufacturing options and coordinate communication with production partners. Our aim is to balance competitive pricing with the quality requirements and timescales your business depends on, giving you a UK-based point of contact throughout the sourcing process.

Whether you're taking a new product from first prototype to volume production, or need batches of custom metal parts and ongoing production support, FabricationStar helps you access the right manufacturing capabilities for your project.



One point of contact

From first drawing to delivered parts.

UK, Türkiye & global partners

A vetted network, matched to each job.

Quality checked throughout

At every stage — not just at the end.

No-obligation quotes

Clear, itemised pricing and lead times.

How It Works

One point of contact, from first drawing to delivered parts — here's what happens at each stage of your project.



1 Share your requirement

Send us your drawings, specifications or even a rough sketch of what you need — DXF, STEP, PDF or similar. If you don't have a formal drawing yet, a clear description of the part, material and quantity is enough for us to get started. The more detail you can share, the faster and more accurate your quote will be.



2 We source the best fit

We take your requirement to our vetted network of manufacturing partners across the UK, Türkiye and beyond, comparing capability, capacity and pricing to find the right partner for your specific job. We don't default to whoever's available — we match the job to the partner best suited to it.



3 Approve your quote

You'll receive a clear, itemised quotation covering pricing, lead time and specification — no jargon, no hidden extras and no obligation to proceed. If anything needs adjusting — quantity, material, finish — we'll revise it until it's right, before any production begins.



4 Manufacturing and Quality

Once you approve the quote, production begins at the partner facility, with our team staying involved throughout. Parts are manufactured to your exact specification, with quality checked at each stage — not just inspected once at the end — so issues are caught early rather than after the fact.



5 Packaging and Palletising

Finished parts are carefully packed and palletised for transport, protected against damage in transit — whether that's a handful of components or a full container load. Packaging is matched to how the order will actually be shipped, not a one-size-fits-all approach.



6 Shipment and Delivery

Your order is shipped and tracked through to delivery at your site, with us coordinating logistics throughout — so you're not left chasing a partner directly to find out where your order is.

Our Services

Eight capability areas, sourced through our vetted global partner network — from first cut to finished, packaged assembly.



01 · PAGE 5

Laser Cutting

Precision laser cutting for sheet, tube, pipe and profile.

Sheet Metal Laser Cutting · Tube & Pipe Laser Cutting · Profile Laser Cutting · Custom Laser Cutting



02 · PAGE 7

Forming & Bending

Shaping sheet, plate, tube and profile to your specification.

CNC Press Brake Bending · Sheet & Plate Rolling · Tube & Pipe Bending · Section & Profile Bending · Press Forming & Deep Drawing · Hemming & Edge Forming



03 · PAGE 9

Welding & Fabrication

MIG/MAG, TIG, spot, laser and robotic welding.

MIG/MAG Welding · TIG Welding · Spot & Projection Welding · Laser Welding · Robotic Welding · Weld Finishing & Polishing



04 · PAGE 11

Machining & Casting & Pressing

CNC machining, casting and press work for precise parts.

CNC Milling · CNC Turning · Drilling & Tapping · Precision Grinding · Sand Casting · Die Casting · Investment Casting · Metal Stamping · Blanking & Piercing · Embossing



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Surface Treatment & Finishing

Coating, mechanical and chemical finishing to your spec.

Powder Coating · Wet Painting · Galvanising · Electroplating · Anodising · Shot Blasting & Grit Blasting · Grinding & Polishing · Brushing & Satin Finishing · Deburring & Edge Rounding · Pickling & Passivation · Electropolishing

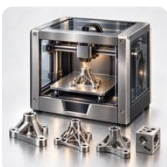


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Design & Engineering Support

CAD, DFM, reverse engineering and technical documentation.

2D CAD Drafting · 3D CAD Modelling · Design for Manufacture (DFM) · Sheet Metal Design & Development · Reverse Engineering · Material Selection · Prototyping & Design Validation · Tooling, Jig & Fixture Design · Engineering Analysis & Simulation · Technical Documentation



07 · PAGE 20

Prototyping & Product Development

From concept to pilot production, validated before volume.

Concept Development · Prototype Manufacturing · Testing & Refinement · Pilot Production



08 · PAGE 22

Assembly & Integration & Packaging

Mechanical assembly, integration and protective packaging.

Mechanical Assembly · Component Integration · Kitting & Labelling · Protective Packaging & Dispatch

SERVICE 01 OF 08

Laser Cutting

Precision laser cutting sourced through partners running modern fibre laser equipment — for sheet metal, tube, pipe and structural profile.

Our laser cutting services cover sheet metal, tubes, pipes and structural profiles, producing accurately shaped parts for engineering, construction and architectural projects. From functional components to decorative metalwork, we work from your technical drawings and CAD files to achieve the dimensions and detailing your application requires.

The process accommodates intricate contours, holes, slots and bespoke patterns, offering design flexibility across a wide range of applications. Clean cuts and efficient material layouts help minimise waste and reduce additional finishing work. Whether you need prototypes ahead of a production run or a batch of matching parts, we prepare your metalwork for fabrication, welding and assembly.



Precision cuts, tight tolerances — let's get your parts moving.

Tell us what you need and we'll get you a competitive quote directly.

[Request a Quote](#)

Capabilities



Sheet Metal Laser Cutting

Our sheet metal laser cutting service produces precise components with clean edges and intricate details in steel, stainless steel and aluminium. Working from your drawings or CAD files, we cut custom shapes, holes and profiles to your specifications. Suitable for prototypes and repeat production runs, the process offers consistent accuracy while minimising material waste.



Tube & Pipe Laser Cutting

Our tube and pipe laser cutting service creates precise holes, slots, notches and complex profiles in round, square and rectangular sections. Working from your drawings or CAD files, we cut components to your specifications, preparing them for accurate fit-up, welding and assembly. Suitable for custom fabrication and repeat production runs, the process delivers consistent results while reducing the need for secondary machining.



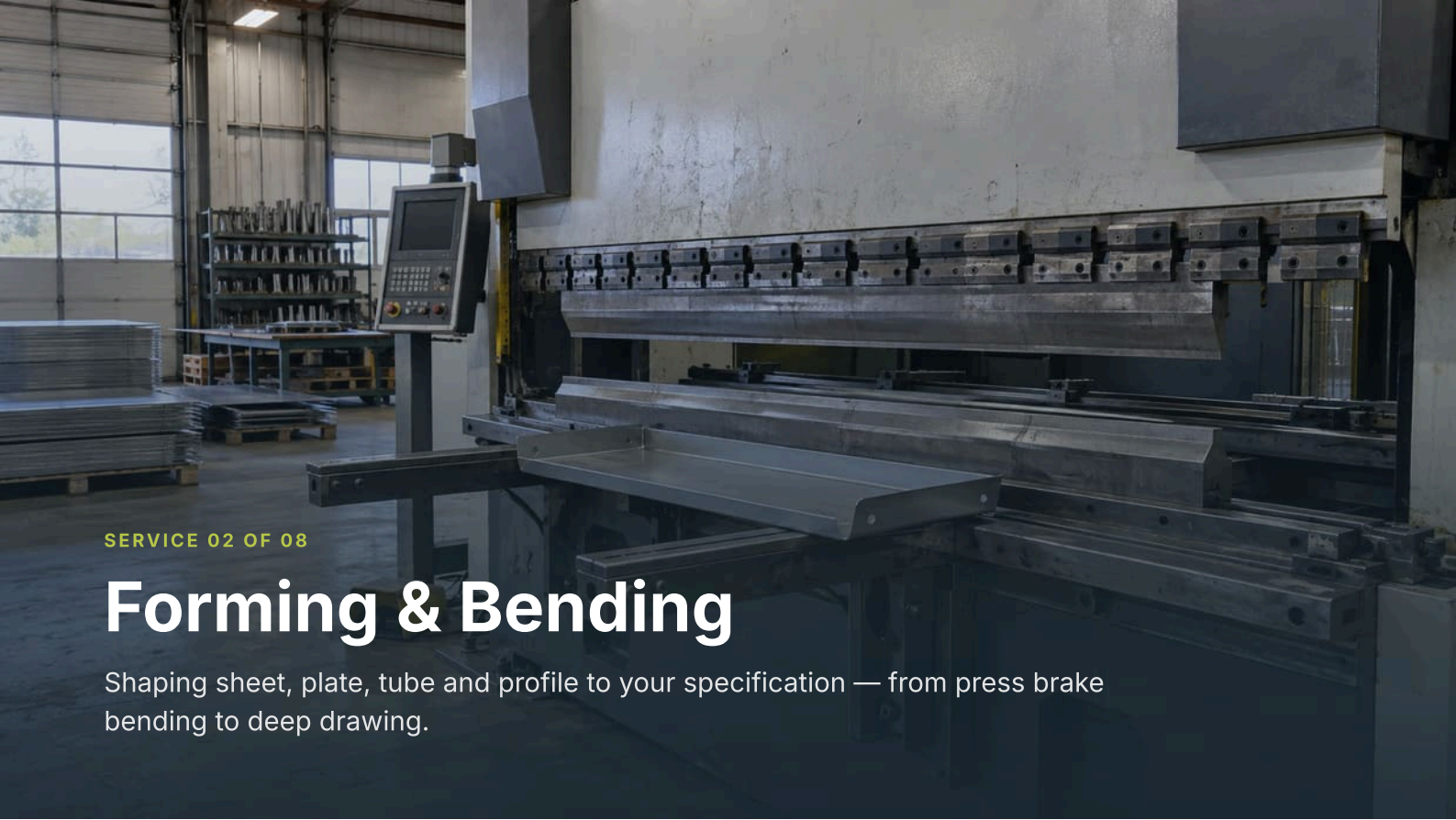
Profile Laser Cutting

Our profile laser cutting service produces precise holes, slots, notches and contours in metal profiles and open sections, including angles and channels. Working from your drawings or CAD files, we cut each component to your specifications for accurate fit-up, welding and assembly. Suitable for structural frameworks, machinery components and custom metal fabrication, the service supports prototypes and repeat production runs while reducing the need for additional drilling and machining.



Custom Laser Cutting

Bring distinctive metalwork ideas to life with custom laser cutting for decorative screens, branded signage, architectural features and specialist parts. We translate your artwork or technical plans into carefully defined cuts, from delicate detailing to bold geometric designs. Each piece is shaped around its intended use, giving you flexibility beyond standard sizes and off-the-shelf options.



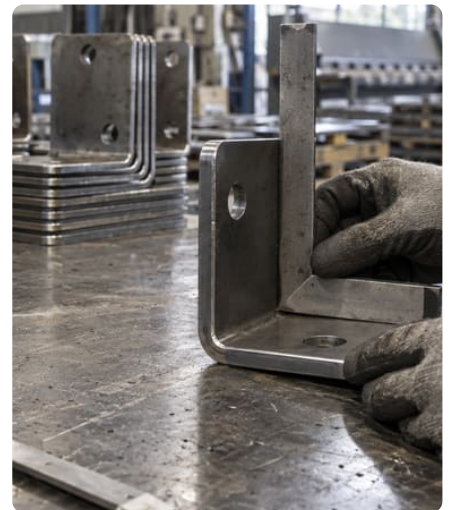
SERVICE 02 OF 08

Forming & Bending

Shaping sheet, plate, tube and profile to your specification — from press brake bending to deep drawing.

Our metal forming and bending services transform flat sheets and sections into practical three-dimensional shapes for fabrication, construction and industrial applications. From simple folds and angled brackets to channels, enclosures and complex profiles, we shape each part around your project's dimensions and functional requirements.

Careful control of bend angles, radii and material behaviour helps achieve consistent geometry and reliable fit. We follow your technical drawings, taking account of connection points and assembly needs throughout the forming process. Whether your project involves bespoke metalwork or repeated components, our service helps turn cut blanks into parts ready for the next stage of manufacture.



Every bend exactly where you need it — let's shape your next run.

Tell us what you need and we'll get you a competitive quote directly.

[Request a Quote](#)

Capabilities



CNC Press Brake Bending

CNC press brake bending creates controlled, repeatable folds in sheet metal, producing everything from mounting brackets to trays and equipment housings. Computer-controlled positioning guides each bend, while tooling is selected to suit the material thickness and required radius. This approach maintains dimensional consistency across multiple bends and matching parts, helping components align correctly during installation or assembly.



Sheet & Plate Rolling

Our sheet and plate rolling service shapes flat metal into cylinders, curved panels and circular sections for tanks, ductwork, guards and architectural features. By passing the material through adjustable rollers, we develop a gradual curve suited to the specified diameter or radius. Material thickness and springback are considered throughout the process to achieve an even profile, with edges prepared for joining where the design requires a closed section.



Tube & Pipe Bending

Our tube and pipe bending service produces smooth bends for handrails, frames, pipework and bespoke fabrications. Each bend follows the required angle and centreline radius, with attention to wall thickness and cross-sectional shape to limit flattening and distortion. Forming continuous lengths can reduce the number of welded joints, creating a cleaner appearance and simplifying installation. We accommodate individual bends and multi-bend configurations to suit your layout.



Section & Profile Bending

Section and profile bending creates sweeping curves and arches in metal angles, channels, beams and hollow sections. Used for curved frameworks, support rings and architectural metalwork, the process shapes structural profiles to the radius required by your design. Attention to section orientation and material behaviour helps control twisting and distortion, allowing curved members to fit accurately with adjoining components.



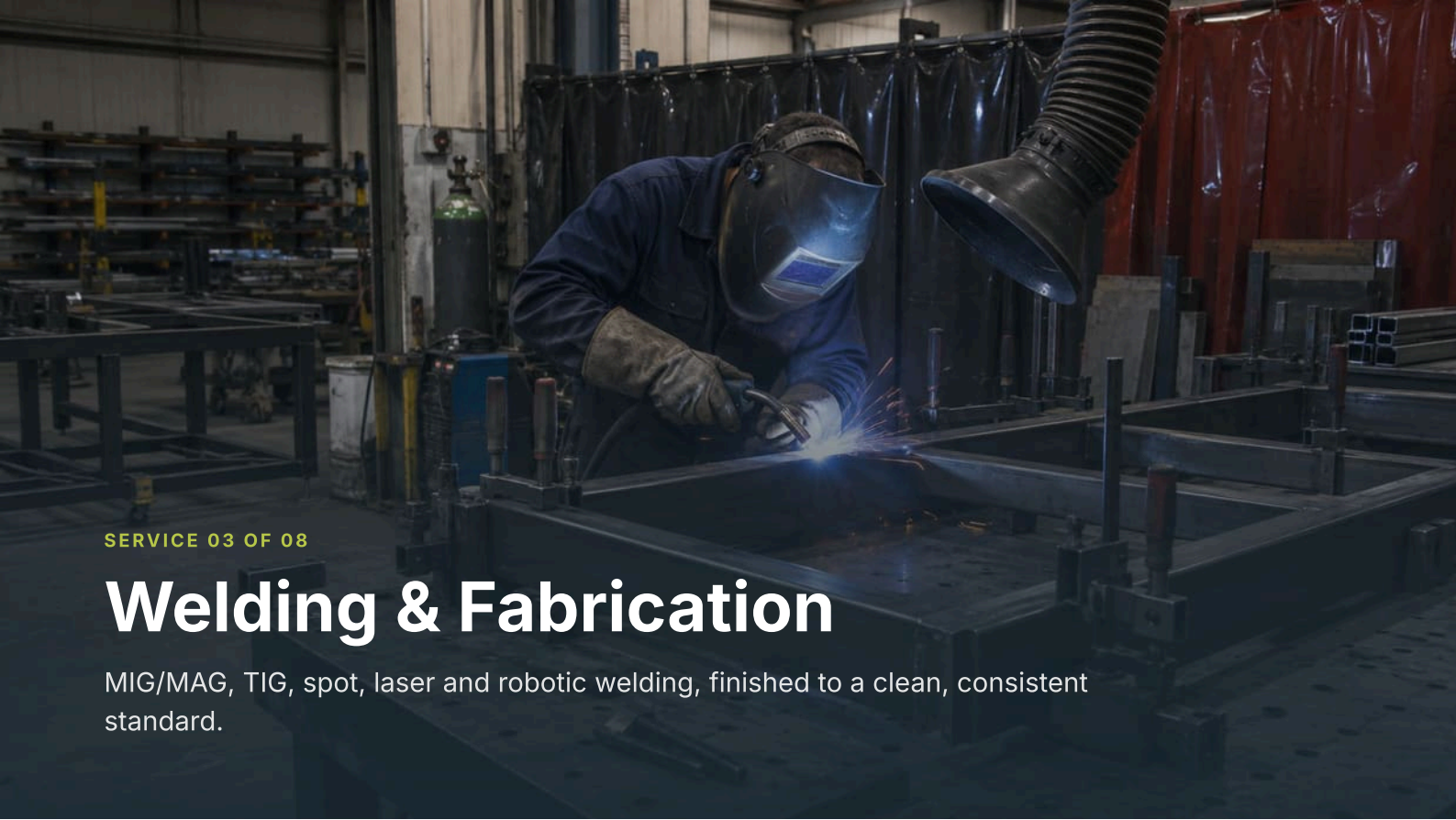
Press Forming & Deep Drawing

Press forming and deep drawing turn sheet metal blanks into recessed, hollow and contoured parts using matched punches and dies. Applications include metal housings, covers, cups and containers, where a seamless body can reduce the need for welded construction. Tool geometry, material flow and forming depth are carefully considered to limit thinning and wrinkling, supporting consistent results across repeated production.



Hemming & Edge Forming

Hemming and edge forming refine exposed sheet metal edges by folding, curling or shaping them into a finished profile. Commonly used on panels, doors, covers and enclosures, these features help conceal sharp edges, improve rigidity and create a neat perimeter. Depending on the application, the edge can also provide a joining point or retain a mating part, combining practical function with a clean appearance.



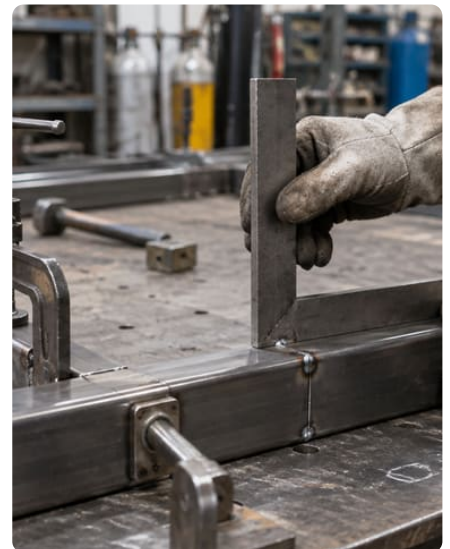
SERVICE 03 OF 08

Welding & Fabrication

MIG/MAG, TIG, spot, laser and robotic welding, finished to a clean, consistent standard.

Our welding and fabrication services bring individual metal parts together to create frames, assemblies and finished metalwork for commercial, industrial and architectural applications. Working from your drawings, we coordinate component preparation, joint alignment and welding to meet the practical demands of your project.

Each fabrication is planned around its intended use, with consideration given to material selection, connection details and access for installation. Careful fit-up and controlled welding help manage distortion and maintain the required dimensions. From bespoke brackets and equipment supports to larger fabricated structures, we deliver metalwork ready for finishing or integration into your wider project.



Strong joints, clean finishes — welded right, every time.

Tell us what you need and we'll get you a competitive quote directly.

[Request a Quote](#)

Capabilities



MIG/MAG Welding

MIG/MAG welding offers an efficient way to join metal using a continuously fed wire and shielding gas. Well suited to frames, brackets and general fabrications, it accommodates long seams and repeated joints across a range of material thicknesses. The wire, gas mixture and welding settings are matched to the metal and joint design, helping achieve sound connections with controlled weld profiles.



TIG Welding

TIG welding provides close control over heat and filler metal, making it well suited to thin-gauge materials, stainless steel and aluminium. Its focused arc allows for neat seams on visible joints, detailed assemblies and components where appearance matters. The process is particularly useful for intricate work and delicate sections, with careful preparation helping produce clean welds and minimise distortion.



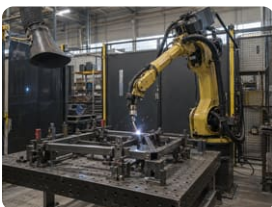
Spot & Projection Welding

Spot and projection welding join metal through localised electrical resistance and pressure, without added filler material. Spot welding secures overlapping sheets at individual points, while projection welding concentrates heat at raised features to attach components such as weld nuts and studs. These methods suit sheet metal assemblies, cabinets and panels, providing repeatable connections with short cycle times and limited heat spread.



Laser Welding

Laser welding uses a concentrated beam to fuse metal along a narrow seam, making it suitable for thin sections, detailed components and joints with limited access. Localised heat input helps reduce distortion, while a small weld footprint can minimise subsequent finishing. Applications include stainless steel housings, precision assemblies and visible metalwork where a discreet joint is desirable.



Robotic Welding

Robotic welding automates programmed weld paths for batches of matching metal components, from brackets and subassemblies to larger frames. Consistent travel speed, torch positioning and welding parameters help maintain uniform results throughout production. Dedicated fixtures hold each part in position, making this approach particularly effective for repetitive work where dependable output and efficient cycle times matter.



Weld Finishing & Polishing

Weld finishing and polishing refine welded areas by removing excess material, blending transitions and improving surface appearance. Depending on the required finish, joints can be ground flush, smoothed or polished to complement the surrounding metal. Particularly useful for exposed stainless steel, handrails and architectural features, the work is carried out with attention to the weld profile and the component's functional requirements.

SERVICE 04 OF 08

Machining & Casting & Pressing

CNC machining, casting and press work for parts that need tight tolerances or specific material properties.

Our machining, casting and pressing services offer versatile routes to producing metal components for machinery, equipment and specialist applications. Machining creates defined features by removing material, casting forms parts from molten metal, and pressing uses tooling and force to shape sheet metal into repeatable forms.

These processes can be used individually or combined to suit your component's geometry, material and production quantity. Cast or pressed parts can be machined further to achieve accurate mating surfaces, bores and fixing points. From initial development to batch production, we work to your specifications with attention to dimensional requirements, surface finish and how each part will function within the finished assembly.



From raw material to precision part — let's get it made.

Tell us what you need and we'll get you a competitive quote directly.

[Request a Quote](#)

Capabilities

MACHINING



CNC Milling

CNC milling uses rotating cutting tools to create pockets, slots, holes and contoured surfaces in metal workpieces. It is well suited to mounting blocks, machine housings and custom parts that require several features positioned accurately relative to one another. Guided by your CAD model or engineering drawing, the milling process controls cutting depth and tool movement to achieve the specified dimensions and surface finish.



CNC Turning

CNC turning shapes rotating metal stock into cylindrical components such as shafts, bushes, pins and threaded fittings. Cutting tools form external diameters, internal bores, grooves and tapers, allowing several features to be produced in a single setup. Particular attention is given to concentricity and mating dimensions, helping parts rotate smoothly or fit securely within bearings, housings and other assemblies.



Drilling & Tapping

Drilling and tapping prepare metal components for bolted connections by creating accurately positioned holes and internal threads. From clearance holes in plates to threaded fixing points in machined blocks, each feature is matched to the specified fastener size and engagement depth. Suitable for individual parts and repeated hole patterns, the service supports straightforward assembly and secure fastening without the need for separate nuts where the design allows.



Precision Grinding

Precision grinding refines metal surfaces where tight tolerances and a fine finish are essential. Abrasive wheels remove small amounts of material to improve flatness, parallelism or roundness on parts such as shafts, spacers and tooling. Often used after machining or heat treatment, the process brings critical surfaces to their final dimensions, supporting close fits and reliable contact between mating components.

CASTING



Sand Casting

Sand casting produces metal parts by pouring molten material into a shaped sand mould, offering flexibility for large components and complex forms. Internal cores can create hollow sections and passages, making the process suitable for pump bodies, machinery bases and industrial housings. Once cooled, the casting is removed from the mould and cleaned, with machining applied where precise dimensions or finished contact surfaces are required.



Die Casting

Die casting injects molten metal into reusable steel moulds under pressure to produce detailed, consistently shaped components. Particularly suited to aluminium and zinc alloys, it enables thin walls, defined edges and integrated features such as ribs and mounting bosses. The process is an efficient choice for higher-volume production of enclosures, handles and equipment parts, with machining or surface treatments added where needed.

Capabilities (continued)



Investment Casting

Investment casting, also known as lost-wax casting, creates intricate metal components using a ceramic mould formed around a disposable wax pattern. It accommodates fine details, complex contours and internal features that can be difficult to achieve through conventional machining alone. Common applications include valve components, impellers and specialist fittings, where near-net shapes and a smooth cast finish help reduce subsequent machining.

PRESSING & STAMPING



Metal Stamping

Metal stamping uses a press and dedicated dies to cut and shape sheet metal into components such as clips, brackets, terminals and cover plates. Operations including blanking, piercing, embossing and forming can be combined to create multiple features efficiently. Well suited to repeat production, the process delivers consistent part geometry while reducing the handling needed between separate manufacturing stages.



Blanking & Piercing

Blanking and piercing use punch-and-die tooling to cut sheet metal into defined outlines and openings. Blanking produces the outer shape of a component, while piercing creates holes, slots and other internal cut-outs. Often carried out together, these operations prepare flat parts for further forming or assembly, maintaining consistent profiles and hole positions across production batches.



Embossing

Metal embossing presses raised or recessed details into sheet metal without cutting through its surface. It can add stiffening ribs, textured patterns, identification marks and decorative features to panels, covers and other components. Matched tooling defines the depth and shape of each impression, creating repeatable details that enhance appearance or improve rigidity without adding separate parts.

SERVICE 05 OF 08

Surface Treatment & Finishing

Coating, mechanical and chemical finishing to protect your parts and meet your spec — from powder coating to electropolishing.

Our surface treatment and finishing services prepare, protect and enhance metalwork for its intended environment. From removing surface imperfections to applying protective and decorative finishes, we help achieve the appearance and durability your project needs.

Treatment selection takes account of the base metal, exposure conditions and required texture or colour. Thorough preparation supports coating adhesion, while attention to edges, joints and visible faces helps create a consistent finish. Whether the priority is corrosion resistance, everyday wear or architectural appeal, we finish components and fabricated assemblies to suit their use.



A finish that protects, performs and looks the part.

Tell us what you need and we'll get you a competitive quote directly.

[Request a Quote](#)

Capabilities

COATING & PROTECTION



Powder Coating

Powder coating gives metal components a durable, decorative finish in a wide choice of colours and textures. Dry powder is applied electrostatically to a prepared surface, then cured with heat to form a bonded coating. Suitable for frames, panels, enclosures and architectural metalwork, it helps resist everyday wear and corrosion when the preparation and coating system are matched to the intended environment.



Wet Painting

Wet painting applies liquid primers and topcoats to metalwork, offering flexibility in colour, sheen and protective performance. It is particularly useful for large fabrications, assembled equipment and parts that cannot undergo high-temperature curing. Paint systems are selected to suit the substrate and service conditions, with controlled application helping achieve even coverage across complex shapes and exposed surfaces.



Galvanising

Hot-dip galvanising protects steel by immersing prepared components in molten zinc, creating a bonded coating that helps prevent rust. Common applications include outdoor frameworks, railings, support brackets and structural fabrications exposed to weather. The zinc provides both a protective barrier and sacrificial protection at minor surface damage, helping extend service life and reduce maintenance.



Electroplating

Electroplating deposits a thin layer of metal onto a component using an electrical current, enhancing its surface properties without significantly changing its shape. Finishes such as zinc, nickel and chrome can provide corrosion protection, wear resistance or decorative appeal, depending on the application. Coating thickness and coverage are considered alongside dimensional tolerances, particularly for threads, mating surfaces and detailed parts.



Anodising

Anodising strengthens the natural oxide layer on aluminium, creating a finish that becomes part of the metal surface. It improves resistance to corrosion and abrasion while offering clear or coloured options that retain the material's metallic character. Often specified for architectural trims, housings and machined components, the process requires allowance for coating growth on closely fitted features.

MECHANICAL FINISHING



Shot Blasting & Grit Blasting

Shot blasting and grit blasting remove rust, mill scale and old coatings from metal using propelled abrasive media. The treatment cleans the surface and creates a profile that helps subsequent paint or protective coatings adhere. Abrasive type and operating conditions are matched to the material and its condition, preparing castings, steel sections and fabricated assemblies for further finishing.

Capabilities (continued)



Grinding & Polishing

Grinding and polishing smooth metal surfaces, remove tool marks and refine the appearance of finished components. Progressively finer abrasives achieve the required texture, from a uniform brushed finish to a reflective polish. Ideal for stainless steel panels, handrails and decorative metalwork, the service pays particular attention to visible faces, edges and transitions for a consistent overall appearance.



Brushing & Satin Finishing

Brushing and satin finishing give metal a subtle, low-gloss appearance with a controlled surface texture. Directional brushing creates a visible grain, while satin finishes offer a softer sheen that reduces glare. Often chosen for stainless steel trims, lift panels and interior fittings, these treatments blend minor surface marks and bring visual consistency to adjoining pieces.



Deburring & Edge Rounding

Deburring and edge rounding remove sharp burrs left by cutting, drilling and machining, making metal parts easier to handle and assemble. Edges can be softened to a specified radius, helping reduce snagging and improve coating coverage around corners. The process also clears unwanted material from holes and profiles while preserving the dimensions needed for a reliable fit.

CHEMICAL FINISHING



Pickling & Passivation

Pickling and passivation restore stainless steel surfaces after welding and fabrication. Pickling removes heat tint, oxide scale and a thin surface layer, while passivation removes free iron contamination and supports the metal's natural protective oxide film. These treatments help maintain corrosion resistance on pipework, tanks and fabricated assemblies, particularly where cleanliness and exposure to demanding conditions matter.



Electropolishing

Electropolishing uses an electrochemical process to remove a controlled microscopic layer from metal, smoothing surface peaks and producing a brighter finish. Commonly applied to stainless steel, it can improve cleanability and corrosion resistance on components used in food processing, pharmaceutical equipment and fluid handling. Unlike mechanical polishing, it works without abrasive contact, making it useful for intricate shapes and hard-to-reach surfaces.

SERVICE 06 OF 08

Design & Engineering Support

CAD, DFM, reverse engineering and technical documentation — support from concept through to production-ready design.

Our design and engineering support services help turn initial concepts into practical, production-ready metal components and assemblies. From CAD modelling and technical drawings to material selection and design for manufacture, we develop solutions around your application, production requirements and budget.

Whether you need to refine an existing part or develop a new fabrication, we review geometry, tolerances, joining methods and finishing requirements to identify potential manufacturing challenges early. By considering how each component will be cut, formed, machined and assembled, we help reduce unnecessary complexity, improve fit and support a smoother transition from prototype to repeat production.

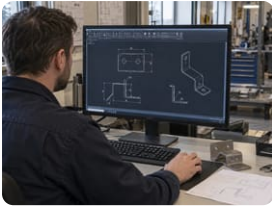


Great parts start with great design — let's engineer yours.

Tell us what you need and we'll get you a competitive quote directly.

[Request a Quote](#)

Capabilities



2D CAD Drafting

Our 2D CAD drafting service translates sketches, existing drawings and design requirements into clear technical documentation for metal fabrication. We prepare dimensioned part drawings, assembly layouts and fabrication details, including relevant tolerances, hole positions, bend lines and weld symbols. Each drawing communicates the information needed for production and inspection, helping minimise ambiguity, simplify revisions and keep workshop teams aligned with your specifications.



3D CAD Modelling

Our 3D CAD modelling service develops detailed digital models of metal components and assemblies, allowing you to assess shape, fit and function before production begins. From sheet metal enclosures to fabricated structures, we model individual parts and their connections to help identify clashes, check clearances and refine assembly arrangements. These models provide a foundation for design reviews, manufacturing drawings and prototype development, helping reduce avoidable changes on the workshop floor.



Design for Manufacture (DFM)

Our design for manufacture (DFM) service reviews metal component designs to make production more efficient and cost-effective. We assess material thicknesses, bend radii, hole spacing, tolerances and tool access against the intended fabrication processes. By identifying features that create unnecessary machining, difficult welds or excess waste, we recommend practical adjustments that preserve your part's function while improving manufacturability and consistency across production runs.



Sheet Metal Design & Development

Our sheet metal design and development service turns product requirements into workable designs for enclosures, panels, brackets and custom assemblies. We define folded geometry, develop flat patterns and account for bend allowances, material behaviour and joining details. Attention to seam positions, fastening points and component access helps each design progress from an initial concept to a fabrication-ready solution that fits together as intended.



Reverse Engineering

Our reverse engineering service converts existing metal parts into CAD models and technical drawings when original design data is unavailable. By measuring physical samples and examining their features, interfaces and assembly requirements, we develop documentation for replacement, modification or reproduction. Where components are worn or damaged, we assess critical dimensions and mating surfaces to help establish the intended geometry and support manufacturing decisions.



Material Selection

Our material selection service helps you choose suitable metals and grades for your component's operating conditions and manufacturing requirements. We weigh strength, weight, corrosion resistance and temperature exposure alongside formability, weldability and finishing compatibility. From steel and stainless steel to aluminium and other alloys, we assess practical options against availability and budget, helping balance production costs with the performance and service life your application requires.

Capabilities (continued)



Prototyping & Design Validation

Our prototyping and design validation service puts metal component designs to the test before full production. Physical prototypes allow us to check dimensions, assess fit and assembly, and evaluate function against agreed requirements. Findings guide adjustments to geometry, materials or fabrication details, helping resolve issues early and establish a more reliable design for manufacture.



Tooling, Jig & Fixture Design

Our tooling, jig and fixture design service develops practical solutions for locating, supporting and securing metal parts during fabrication, machining and assembly. We consider clamping forces, tool access, component tolerances and operator handling to create arrangements suited to each task. From welding fixtures to drilling jigs, these designs help reduce setup time, control movement and maintain repeatable positioning across production batches.



Engineering Analysis & Simulation

Our engineering analysis and simulation service evaluates how metal components and assemblies may behave under defined loads and operating conditions. We examine stress, deformation and potential areas of weakness to guide decisions on geometry, material grades and reinforcement. By comparing design options before manufacture, we help target improvements and support prototype testing, with results assessed against the assumptions and performance requirements of your application.



Technical Documentation

Our technical documentation service brings together the information needed to manufacture, assemble and inspect metal products. We prepare bills of materials, fabrication specifications, assembly instructions and inspection criteria tailored to your project. Clear part references and revision records help teams work from consistent information, supporting supplier coordination, component traceability and future maintenance or design updates.

SERVICE 07 OF 08

Prototyping & Product Development

From concept to pilot production, validated and refined before you commit to volume.

Our metal prototyping and product development services turn early ideas into physical parts and assemblies you can test, refine and prepare for manufacture. Combining sheet metal fabrication, machining and other suitable processes, we produce prototypes that help you evaluate dimensions, material choices, assembly methods and practical performance.

From an early concept model to a functional pre-production sample, each stage provides an opportunity to resolve design questions before committing to larger quantities. We work with you to incorporate feedback, simplify construction and develop a repeatable production approach, supporting the transition from initial concept to a finished metal product. We offer prototyping as the first step towards a volume production run.



From first sketch to first production run — let's build it.

Tell us what you need and we'll get you a competitive quote directly.

[Request a Quote](#)

Capabilities



Concept Development

Our concept development service shapes early product ideas into practical proposals for metal components and assemblies. Starting with your intended application, we explore layouts, key features and construction options through sketches and preliminary CAD concepts. Considering usability, fabrication methods and cost from the outset helps define a clear direction for detailed design and prototype development.



Prototype Manufacturing

Our prototype manufacturing service brings metal designs into physical form for hands-on evaluation. Using suitable cutting, forming, machining and joining processes, we produce individual components and complete assemblies from your drawings or CAD models. These samples let you check fit, handling and assembly before committing to production, with material and process choices tailored to what the prototype needs to demonstrate.



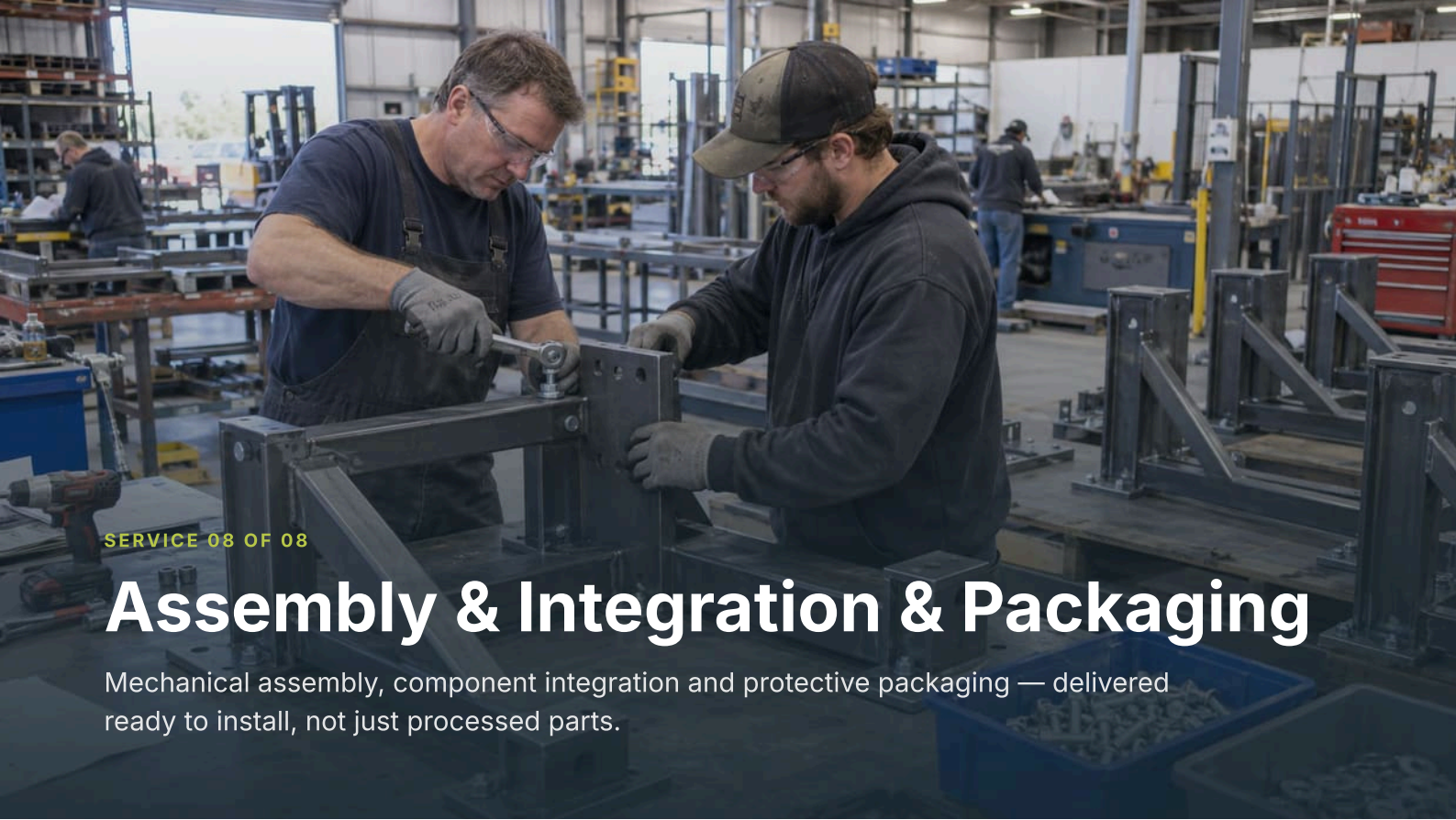
Testing & Refinement

Our testing and refinement service assesses metal prototypes against agreed functional and dimensional requirements, turning findings into practical design improvements. We investigate issues such as misalignment, unwanted movement and assembly difficulties, then adjust relevant features, connections or material choices. Follow-up checks help confirm whether each revision resolves the identified problem, building confidence in the design before production.



Pilot Production

Our pilot production service bridges the gap between prototype approval and full-scale metal manufacturing. By producing a limited batch using the intended materials, tooling and fabrication sequence, we assess process consistency, assembly efficiency and inspection requirements. This trial run helps reveal issues that may not appear in a single prototype, allowing practical adjustments before production volumes increase.



SERVICE 08 OF 08

Assembly & Integration & Packaging

Mechanical assembly, component integration and protective packaging — delivered ready to install, not just processed parts.

Our assembly, integration and packaging services bring individual metal components together into complete products, ready for delivery or installation. We combine fabricated parts with specified fasteners, fittings and other components, checking alignment, fit and operation against your project requirements.

From straightforward mechanical assemblies to products containing multiple subassemblies, we plan the build sequence to support consistent results and efficient handling. Once assembled, items are packed to suit their size, finish and transport needs, with protective materials and clear identification to help prevent damage and simplify receipt at their destination.



Delivered ready to install, not just processed parts.

Tell us what you need and we'll get you a competitive quote directly.

[Request a Quote](#)

Capabilities



Mechanical Assembly

Our mechanical assembly service combines metal parts, fasteners and moving components into functional units built to your specifications. We position and secure brackets, housings, shafts and fittings, checking alignment, clearances and fastening requirements throughout the build. From compact mechanisms to larger fabricated assemblies, careful attention to component fit supports reliable operation and straightforward installation into your finished product.



Component Integration

Our component integration service incorporates specified fittings, mechanisms and bought-in parts into fabricated metal products. We assess mounting points, interfaces and access requirements to ensure each item fits within the overall assembly and can be installed or serviced as intended. Bringing these elements together before delivery helps identify compatibility issues early and reduces the work required at your installation site.



Kitting & Labelling

Our kitting and labelling service groups metal components, fasteners and accessories into organised sets for assembly, installation or dispatch. Each kit is checked against an agreed parts list and labelled with relevant item references, quantities and project details. Clear identification helps teams locate the right parts quickly, reduces sorting on arrival and supports an orderly handover to your production team or end customer.

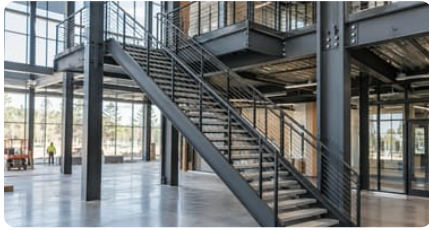


Protective Packaging & Dispatch

Our protective packaging and dispatch service prepares fabricated metal parts and assemblies for secure transport. We select wrapping, cushioning, dividers and suitable pallet or crate arrangements according to each item's weight, geometry and surface finish. Careful packing helps prevent scratches, movement and impact damage in transit, while shipment checks and supporting documentation help ensure your order leaves complete and ready for delivery.

Sectors

Wherever your project sits, we source the right manufacturing partner for it — across these sectors and beyond.



Architectural & Structural Steelwork

- Bespoke steel staircases & access platforms
- Balustrades, handrails & architectural screens
- Structural columns, beams & connection plates
- Canopies, entrance frames & support structures
- Decorative laser-cut panels & facade elements
- Welded assemblies to project drawings
- Surface finishes for exposed architectural metalwork
- Coordinated sourcing for phased installation



Agricultural

- Welded chassis for agricultural implements
- Formed panels, guards & protective covers
- Mounting brackets & reinforced support frames
- Hoppers, chutes & material handling components
- Replacement metal parts for farm equipment
- Machined pins, shafts & attachment fittings
- Protective coatings for demanding outdoor use
- Prototype development & repeat batch supply



Automotive

- Pressed sheet metal panels & door components
- Chassis brackets & body reinforcement sections
- Welded subframes & mounting assemblies
- Battery trays & protective metal housings
- Machined fittings, spacers & connection parts
- Prototype components for vehicle development
- Surface treatments to specified requirements
- Production sourcing for scheduled batch deliveries



Renewables

- Steel support structures for solar panels
- Mounting rails, brackets & fixing plates
- Fabricated components for wind energy equipment
- Battery storage cabinets & enclosure panels
- Equipment platforms & maintenance access structures
- Cable trays & associated metal supports
- Galvanised finishes for exposed installations
- Project-based sourcing from prototype to rollout



Construction

- Steel frameworks for commercial buildings
- Roof trusses, purlins & bracing sections
- Columns, baseplates & anchoring assemblies
- Connection brackets & reinforcement plates
- Secondary steelwork for building services
- Formed channels, flashings & edge details
- Fabrication coordinated with project drawings
- Delivery planning around construction phases



Kiosk

- Sheet metal housings for self-service kiosks
- Screen surrounds & display mounting frames
- Cut-outs for payment terminals & peripherals
- Lockable service doors & removable panels
- Internal shelves, brackets & equipment supports
- Ventilation slots & cable routing provisions
- Powder-coated colours to suit your branding
- Enclosure assemblies prepared for device integration

Sectors (continued)



Urban Furniture

- Two-tier bicycle parking systems & single-level cycle racks
- Steel-framed shelters, secure cycle stores & bike lockers
- Scooter racks, bike repair stands & cycle parking accessories
- Metal benches & public seating frames
- Bollards, barriers & pedestrian railings
- Litter bins & recycling station housings
- Planters, tree guards & landscape edging
- Galvanised & powder-coated finishes for outdoor use



Machine Parts

- CNC-milled blocks, plates & mounting components
- Turned shafts, bushes & precision spacers
- Bearing housings & flanged connections
- Drilled holes & tapped fastening points
- Ground surfaces for specified fits
- Replacement parts developed from samples
- Material selection for operating requirements
- Prototype machining & repeat production batches



Metal Cabinets

- Bespoke cabinets for industrial equipment
- Electrical housings & control panel enclosures
- Storage cupboards, drawers & shelving units
- Folded doors with specified hinges & locks
- Internal partitions & mounting backplates
- Cable entries, ventilation slots & access openings
- Powder-coated or stainless steel finishes
- Cabinet assembly, labelling & protective packaging



Generator Enclosures

- Custom canopies for generator installations
- Folded side panels & roof sections
- Ventilation louvres & grille assemblies
- Hinged service doors & removable access covers
- Steel skid bases & equipment mounting frames
- Internal provisions for specified acoustic insulation
- Cable openings & maintenance access details
- Exterior coatings in project-specific colours



Retail Displays

- Freestanding metal merchandising displays
- Modular shelving & gondola units
- Countertop stands & point-of-sale fixtures
- Hanging rails, hooks & display brackets
- Perforated panels & product support frames
- Branded shapes, colours & decorative finishes
- Flat-pack designs for transport & installation
- Coordinated production for multi-store rollouts



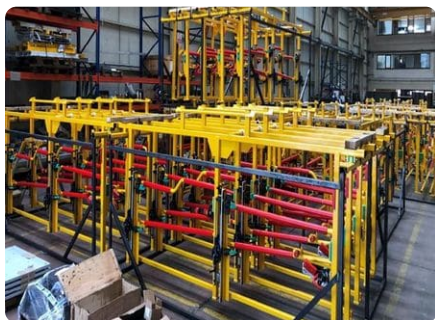
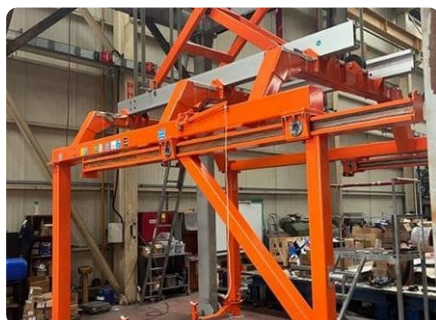
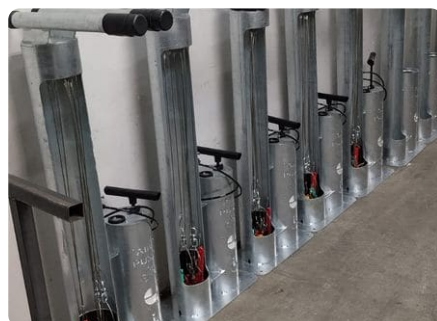
Vehicle Conversions & Superstructures

- Mini tipper, dropside & municipal service bodies
- Refuse collection bodies & rear-loading assemblies
- Semi-trailer structures for moving-floor & tipping applications
- Fabricated bodies for fire engines & rescue vehicles
- Skip loader & hooklift subframes and components
- Tank shells & metalwork for vacuum and combination trucks
- Bus conversions & specialist vehicle interiors
- Custom chassis-mounted structures, lockers & equipment supports

REAL PROJECTS. REAL RESULTS.

Our Works

A look at the work we've delivered for our customers — sourced, managed and shipped through our partner network.



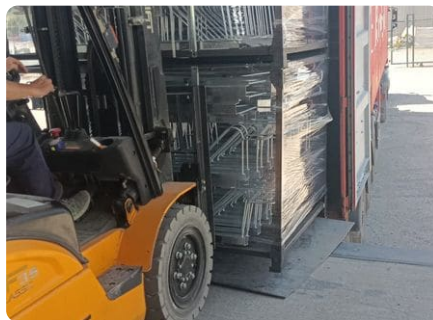
REAL PROJECTS. REAL RESULTS.

Our Works (continued)



REAL PROJECTS. REAL RESULTS.

Our Works (continued)





GET IN TOUCH

Ready to become one of our satisfied customers?

Share your requirement and we'll get you a competitive quote directly. Send us your drawings, specifications or even a rough sketch — DXF, STEP, PDF or similar.

[Request a Free Quote](#)

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