

Sheet Metal Fabrication Specification Sheet

Cutting bending welding assembly and coating under one roof, from prototype to production.

Three overlapping fabrication services: general sheet metal work covering laser cutting, CNC bending, welding, assembly and powder coating; precision sheet metal starting from a prototyping stage; and custom metal fabrication with 4th-axis CNC machining holding tolerances to 0.005 mm. Materials run through aluminium, brass, stainless steel and titanium.

3 products in this category. Every figure below is published on the product pages at trueglowimaging.com/categories/sheet-metal-fab.html

Sheet Metal Services

Sheet Metal Fabrication · OEM and ODM

Custom sheet metal fabrication covering laser cutting, CNC bending, welding, assembly and powder coating in aluminium, brass and stainless steel. CNC technology handles the cutting and forming, welding joins the components, and the finishing stage completes the part. OEM and ODM work are both accepted, and a QC team inspects from incoming raw material through to the finished product.

Specification

Materials	Aluminium, brass, stainless steel
Cutting	CNC laser cutting
Forming	CNC bending
Joining	Welding and assembly
Finishing	Powder coating and surface finishing
Service Type	OEM and ODM
Quality Control	Inspection from raw material through to finished product

Key benefits

Cut Bend Weld and Finish in One Place. Laser cutting, bending, welding, assembly and powder coating under one roof means one purchase order and one party responsible when a bend angle and a weld distortion argue with each other.

Quality Checked From Raw Material Onward. Inspection starts at the material and ends at the finished product rather than at final dispatch only. Most sheet metal problems originate in the material certificate, not on the press brake.

ODM Where You Have a Function Not a Drawing. Every client requirement is different, so work is accepted either as OEM to your drawing or as ODM where the design is developed here from the function.

Automation Behind the Delivery Date. A high level of automation combined with the workforce is what allows orders to be dispatched inside the agreed timeframe rather than when the shop clears.

Where it is used

Enclosures and cabinets for electrical and electronic equipment • Machine guarding and covers for production equipment • Brackets and mounting plates for assemblies • Chassis and frames for equipment builders • Ducting and trays in stainless steel • Prototype panels ahead of a production run

Precision Sheet Metal Fabrication

Precision Sheet Metal · Prototype to production

Precision sheet metal fabrication from prototyping through laser cutting, bending, welding, assembly and powder coating. The service covers the whole path from concept to finished part, including the prototyping stage where a design is proved before tooling or volume is committed. Materials include aluminium, brass and stainless steel, and after-sales support continues past the delivery rather than ending at it.

Specification

Services	Prototyping, laser cutting, bending, welding, assembly, powder coating
Materials	Aluminium, brass, stainless steel
Design Support	Custom solutions on design, material and finish
Volumes	Prototype through to production

Support

After-sales support past delivery

Key benefits

Prototyping Before Volume. The initial stage of bringing a concept to life is treated as its own service. Proving the part in metal is far cheaper than discovering the problem in a production batch.

Welding as an Engineered Step. Joining multiple components into a final product is where sheet metal assemblies usually go out of tolerance. It is treated as part of the process plan, not as an afterthought.

Custom Design Material and Finish. Each client's requirement drives the design, the material and the finish, rather than the shop's standard offering driving the design.

Support After the Sale. The relationship continues past delivery, which matters when a part needs revising after it reaches assembly.

Where it is used

Prototype panels and housings for a new product • Precision enclosures with close hole position tolerances • Welded frames and sub-assemblies • Powder coated covers and fascia panels • Low-volume production of formed components • Design revisions between prototype and production

Custom Fabrication Metal

Custom Metal Fabrication · Tolerance to 0.005 mm

Custom metal fabrication from CAD through machining to post-processing, using 4th-axis CNC machines for complex parts and holding tolerances down to 0.005 mm. Materials include steel, aluminium, titanium and others, selected against the application rather than against shop convenience. Processes available include CNC machining, milling, turning, bending, laser cutting, stamping, welding, assembly, polishing, powder coating and injection moulding, under a zero-defect quality policy.

Specification

Machining	4th-axis CNC machines
Tolerance	To 0.005 mm
Services	CAD, modelling, machining, post-processing
Materials	Steel, aluminium, titanium and others
Processes	CNC machining, milling, turning, bending, laser cutting, stamping, welding, assembly, polishing, powder coating
Quality Policy	Zero-defect policy with rigorous quality control
Typical Parts	CNC bent fabricated metal parts and precision components

Key benefits

Tolerance Down to 0.005 mm. A stated tolerance figure is what separates a machining quotation from a hope. At 0.005 mm the shop is working in the range where fits and bearing seats can be held without hand finishing.

4th-Axis Machining for Complex Parts. A fourth axis lets features on several faces be cut in one setup. Every setup removed is an accumulation of position error removed with it.

CAD to Post-Processing Under One Roof. Modelling, machining and post-processing in one place means the part that is designed is the part that is measured, with no drawing translation between companies.

Zero-Defect Policy With Real Inspection. Quality control is applied rigorously rather than declared, which is the difference on parts where one bad piece stops an assembly line.

Where it is used

Complex machined parts requiring several faces in one setup • CNC bent fabricated metal parts and brackets • Assemblies combining machining, welding and coating • Prototype parts modelled from a concept and machined directly • Precision components in titanium and stainless steel • Parts requiring polishing or powder coating after machining

How To Enquire

Send the process rather than a model number: capacity or flow rate, the product being handled, the container format where relevant, and the utilities already on site. WhatsApp +86 150 5517 9418 or email sales@trueglowimaging.com.

Minimum order is one unit on the process, packaging, utility and crane ranges. Machined, fabricated and moulded parts are quoted from single pieces upward.