# Industrial Laser Cutting Services

Balbird supplies laser-cut sheet-metal components such as brackets, panels, enclosure parts, plates and profiles, with in-house cutting on sheets up to **1500 × 3000 mm**. Larger or overflow requirements are supported through Balbird's cluster of manufacturing partners. Send a drawing to receive a feasibility review and quotation.

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| **1500 × 3000 mm**<br>Maximum sheet size (in-house) | **Cluster support**<br>For larger or overflow requirements | **Cut + finish**<br>Secondary operations coordinated |

Built for production heads, purchase managers and design engineers who need accurate sheet-metal blanks and profiles, or one point of coordination for cutting plus bending, welding and finishing.

## Buyer problems we help solve

- Capacity shortfall or urgent overflow of sheet-metal cutting work.
- Need one supplier to coordinate cutting with bending, welding, finishing or assembly.
- Repeatability concerns across repeat orders and drawing revisions.
- Complex profiles, cut-outs and fine features that are difficult on conventional cutting.
- Moving from prototype quantities to regular production.

## Technical capability

| Parameter | Capability |
|---|---|
| **Process** | CNC laser cutting of sheet metal for profiles, cut-outs and flat blanks. |
| **Maximum sheet size** | 1500 × 3000 mm (in-house). |
| **Materials** | Mild steel, stainless steel and aluminium. Other materials, such as copper or brass, on request subject to feasibility confirmation. |
| **Thickness range** | Maximum and minimum thickness are confirmed by material and grade at the feasibility review. |
| **Tolerance and edge quality** | Depends on material, thickness and geometry. Critical tolerances and edge expectations are confirmed against your drawing before quotation. |
| **Hole and feature limits** | Confirmed per drawing; share minimum hole size, slot width and feature spacing with your RFQ. |
| **Batch size** | Confirmed per RFQ. |
| **Larger requirements** | Handled through cluster support; capacity, quality and delivery are confirmed before the order is accepted. |
| **Secondary operations** | Deburring, tapping, countersinking, bending, welding, finishing and assembly. Each is labelled in-house or network at quotation. |

In-house sheet size is as shown on the Balbird website. All other limits are material- and geometry-dependent and confirmed per RFQ.

## Components and applications

Typical laser-cut parts include:

- Brackets, mounting plates and support parts
- Panels and enclosure components for industrial equipment
- Plates and profiles for fabricated assemblies
- Precision sheet-metal blanks for downstream bending, welding or forming

## Materials and design inputs

- **Drawing formats:** DXF, DWG, STEP or PDF, with revision number.
- **Material details:** grade, thickness and any certificate requirement.
- **Nesting and revisions:** flat patterns are reviewed for nesting and revision before quotation; changes are re-confirmed in writing.

- **Design-for-manufacturing:** our team flags features that may affect cut quality, such as very small holes or tight feature spacing.

## Quality and documentation

- Parts are checked against the drawing; the inspection scope is agreed at quotation.
- Inspection reports and material test certificates can be discussed at RFQ stage, subject to the agreed scope.
- Sample or first-piece approval can be arranged where the requirement calls for it.
- Please share any certification or standard requirements with your RFQ; we confirm what applies to the facility executing the work.

## How an order is executed

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| **1. Enquiry** | You send a drawing or requirement through the capability enquiry page or by email. |
| **2. Feasibility review** | We check drawing, material, tolerances and quantity, and clarify open points with you. |
| **3. Quotation** | You receive a quotation with scope, assumptions and lead-time basis. |
| **4. Facility confirmation** | We confirm the manufacturing route and whether work runs in-house or through the partner network. |
| **5. Sample / approval** | Where required, a sample or first piece is approved before the batch is released. |
| **6. Production & inspection** | Work is made and checked against the agreed drawing and inspection scope. |
| **7. Dispatch & support** | Parts are packed and dispatched; any issue is raised and resolved with our team. |

## Commercial and logistics

- Lead time depends on quantity, material availability, secondary operations and current load; it is stated in each quotation.
- Batch flexibility and any setup or tooling charges are confirmed per RFQ.
- Packaging and delivery coordination are agreed with the quotation.

## Frequently asked questions

**What materials can you laser cut?**
Mild steel, stainless steel and aluminium are the core materials. Others are reviewed case by case. Thickness limits depend on the material and grade.

**What is the largest sheet you can cut?**
In-house capacity is 1500 × 3000 mm. Larger requirements are reviewed for cluster support.

**Which drawing formats do you accept?**
DXF, DWG, STEP and PDF. A DXF or DWG flat pattern with revision number is the fastest route to a quote.

**Can you also bend, weld or finish the parts?**
Yes, we coordinate secondary operations. Each is confirmed as in-house or network when we quote.

**What affects lead time?**
Quantity, material availability, secondary operations and current workload. The basis is stated in the quotation.

**How do I request a quote?**
Send your drawing, material, thickness, quantity and delivery date using the enquiry page below.

## To receive an accurate quotation, please share:

- Drawing (2D) and/or 3D model, with revision number
- Material specification and grade; certificate needs, if any
- Critical dimensions, tolerances, surface finish, inspection needs
- Sheet thickness and any nesting or grain-direction preference
- Quantity, batch size, annual demand and repeat frequency
- Target delivery date and delivery location
- Finishing, coating, assembly, packaging or export requirements
- Quality standards or customer-specific requirements
- Contact person and preferred communication method

## Have a drawing or production requirement?

Send your drawing, material specification, quantity and delivery target to Balbird for a feasibility review. Our team will clarify the requirement and confirm the appropriate manufacturing route, capability and quotation process.

**Enquiry page:** [add website]/capabilities/laser-cutting/enquiry
**Email:** [add enquiry email]
**Website:** [add website]

Limits shown are indicative and depend on material, geometry, tooling, machine and supplier availability. Network or subject-to-feasibility services are confirmed per RFQ before quotation.