# Plasma Cutting & CNC Bending Services

Balbird supports heavy plate cutting and long-length bending for structural brackets, frames, machine bases and folded panels. Plasma cutting is available up to **2000 × 6000 mm** and CNC bending up to **6000 mm** in length. Send a flat pattern and bend drawing to receive a feasibility review and quotation.

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|---|---|---|
| **2000 × 6000 mm**<br>Plasma cutting envelope | **Up to 6000 mm**<br>CNC bending length | **Cut + bend**<br>Combined workflow where available |

Built for fabricators, equipment makers and purchase teams that need large plates cut and formed, with fewer hand-offs between suppliers.

## Buyer problems we help solve

- Large plates that exceed the sheet size of standard laser cutting.
- Long components that need bending lengths beyond ordinary press brakes.
- Splitting one part between a cutting supplier and a bending supplier.
- Need for brackets, frames and bases made to a repeatable drawing.
- Urgent or overflow fabrication capacity.

## Technical capability

| Parameter | Capability |
|---|---|
| **Plasma cutting envelope** | Up to 2000 × 6000 mm. |
| **CNC bending length** | Up to 6000 mm. |
| **Materials** | Plate and sheet material types and thickness ranges are confirmed by material and grade at the feasibility review. |
| **Bend capability** | Bend angle, material and thickness limits, and tooling constraints are confirmed per drawing. |
| **Cut quality and edge condition** | Depends on material and thickness; any cleanup or finishing required after plasma cutting is agreed at quotation. |
| **Tolerances** | Confirmed against the drawing before quotation; critical bends and hole positions should be marked. |
| **Cut and bend together** | Cutting and bending can be coordinated as one workflow; whether both run at one facility is confirmed per RFQ. |
| **Batch size** | Confirmed per RFQ. |

Envelope figures are as shown on the Balbird website. Thickness, bend and tolerance limits depend on material, geometry and tooling and are confirmed per RFQ.

## Components and applications

Typical parts include:

- Heavy plates and structural brackets
- Frames and machine bases
- Folded panels and formed channels
- Fabricated assemblies that combine cut and bent parts

## Materials and design inputs

- **Required inputs:** material grade, thickness, flat pattern, bend drawing, tolerances, quantity and surface-finish needs.
- **Formats:** DXF, DWG, STEP or PDF with revision number.
- **Design-for-manufacturing:** we review bend radii, flange lengths and hole-to-bend distances before quoting.
- **Finishing:** grinding, painting or coating can be coordinated; responsibility is stated in the quotation.

## Quality and documentation

- Dimensional checks against the drawing; the inspection scope is agreed at quotation.
- Material test certificates and inspection reports can be discussed at RFQ stage.

- Sample or first-piece approval for new bent parts where required.
- Share any certification or standard requirements with your RFQ.

## How an order is executed

| | |
|---|---|
| **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 plate availability, quantity, bending complexity and workload.
- Tooling or setup charges, if any, are stated in the quotation.
- Packaging for long and heavy parts and delivery coordination are agreed with the quotation.

## Frequently asked questions

**What is the largest plate you can plasma cut?**
Up to 2000 × 6000 mm. Material and thickness limits are confirmed per RFQ.

**How long a part can you bend?**
CNC bending is available up to 6000 mm in length.

**Can one supplier cut and bend the part?**
Yes, we coordinate cutting and bending as one workflow. We confirm the facility for each step at quotation.

**What do you need for bent parts?**
A flat pattern, a bend drawing, material grade, thickness, tolerances and quantity.

**Is cleanup needed after plasma cutting?**
It depends on material and thickness. Any required edge cleanup is stated in the quotation.

**How do I get a quote?**
Use the enquiry page below and attach your drawing.

## 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
- Flat pattern, bend drawing, bend angles and bend radii
- 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/plasma-cutting-cnc-bending/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.