CNC MACHINING
RFQ CHECKLIST

What to send for a faster, clearer manufacturing review

For custom CNC milled and turned parts

QUICK CHECKLIST

Include each item when it applies to your project. Do not add requirements that are not needed.

- [ ] Part name, part number and drawing revision
- [ ] 3D CAD model, preferably STEP
- [ ] Controlled 2D drawing in PDF
- [ ] Exact material grade and condition
- [ ] Prototype and production quantities
- [ ] Critical dimensions, tolerances and datums
- [ ] Surface finish, edge and cosmetic notes
- [ ] Threads, inserts and assembly requirements
- [ ] Inspection reports and documents required
- [ ] Delivery destination and requested date

Best starting package

A controlled 2D drawing, a matching 3D model, exact material, quantity, finish and inspection scope are usually more useful than several disconnected messages.

Full online guide

1. CONTROL THE FILES AND REVISION

Use a unique part number and revision for every component. Confirm that the 2D drawing and 3D model describe the same revision. Avoid ambiguous file names such as final-new or latest-final.

2. DEFINE THE MANUFACTURING REQUIREMENTS

Category	What to provide	Why it matters
Geometry	3D CAD model and controlled 2D drawing	Geometry alone may not define threads, tolerances, datums or finish notes.
Material	Exact grade, condition, color and required documents	Different grades machine, finish and perform differently.
Quantity	Prototype quantity and expected repeat quantity	Quantity affects material, workholding, programming and inspection planning.
Tolerances	Critical dimensions, fits, datums and geometric controls	Functional requirements guide machining and measurement effort.
Finish	As-machined or secondary finish, cosmetic surfaces and edge notes	Finishing can affect dimensions, masking, appearance and lead time.
Hardware	Threads, inserts, supplied parts and assembly notes	The supplier must understand specifications, depth, orientation and responsibility.

Avoid unnecessary over-tolerancing

Mark the features that control fit, motion, sealing, alignment or assembly. Applying the tightest tolerance to every feature can add machining and inspection effort without improving function.

3. USE CLEAR MATERIAL DESCRIPTIONS

- ☐ Aluminum 6061-T6 or 7075-T6
- ☐ Stainless steel 304 or 316
- ☐ POM / acetal with required color
- ☐ Nylon with required grade or reinforcement

4. STATE THE REQUIRED INSPECTION EVIDENCE

- [ ] Standard dimensional inspection
- [ ] First article or critical-dimension report
- [ ] CMM inspection for suitable features
- [ ] Material or surface-treatment documentation
- [ ] Lot, serial or part identification
- [ ] Packaging and labeling requirements

5. ADD DELIVERY AND COMMERCIAL INFORMATION

Information	Provide
Destination	Country, city or postal code so shipping expectations can be separated from manufacturing scope.
Requested date	State whether the date is preferred or firm and whether it supports an assembly, test or customer milestone.
RFQ reference	Buyer contact, project reference and the part numbers included in the request.
Confidentiality	Remove unrelated customer data. State if an NDA is required before technical review.

BEFORE YOU SEND

- [ ] The drawing and 3D model match the same revision.
- [ ] Material, quantity and finish are explicit.
- [ ] Critical dimensions and inspection records are identified.
- [ ] Threads, inserts and assembly responsibility are clear.
- [ ] Destination and requested date are included.
- [ ] Only necessary and approved project data is attached.

READY FOR A MANUFACTURING REVIEW?

Send the drawing, model, material, quantity, finish and inspection scope.

syd-cnc.com/request-a-quote/