



Technical Drawing Checklist

What earns its place on a drawing. The model says what shape the part is; the drawing says what matters about it. Send it as a PDF alongside the model, never instead of it.

SEND IT AS

PDF, alongside the model — never instead of it

MAKE ONE WHEN

The part mates with something, or someone may reorder it

TOLERANCES

Reviewed per project — mark only the few that matter

1 Title block

- ☐ **Part name and part number**
It's how the part is identified on the quote, the traveler and the invoice. A drawing with no name has to be described instead of referenced.
- ☐ **Revision letter or number**
A quote is only meaningful against a specific revision. Without one, nobody can say later which version was built.
- ☐ **Date and who drew it**
When two versions surface, the date settles which is current and the name tells us who to ask about the intent.
- ☐ **Units — stated, not assumed**
A drawing that doesn't say millimeters or inches invites the reader's default. That's the most common way a part arrives the wrong size.
- ☐ **Scale, and whether the views are to it**
If a view is not to scale, say so on that view. Someone will measure off the print otherwise.

2 Material and finish

- ☐ **Material named by grade, not just "aluminum" or "steel"**
Alloy and temper change how a part machines, welds, forms and behaves in service. The family name doesn't narrow it enough to buy stock against.
- ☐ **Any specification the material has to meet**
If a spec is a real requirement rather than a preference, it has to be on the drawing where purchasing can see it, not in an email thread.
- ☐ **Finish or coating callout — and which surfaces get it**
Finish is a real cost line and a real schedule line. "Powder coat" without surfaces means someone guesses which faces are masked.
- ☐ **Cosmetic surfaces marked as cosmetic**
A face that will be seen, handled or photographed is inspected differently from one that's hidden inside an assembly. Say which is which.

3 Dimensions — the few that matter

- ☐ **Mark only the dimensions that control fit or function**
A drawing where every dimension is called out equally tells us nothing about priority. Tolerancing everything costs money and rarely helps.
- ☐ **Leave everything else to a general note**
It frees the shop to make the part the efficient way and concentrates attention where a miss would actually matter.
- ☐ **Say what the part mates with**
A bore that carries a bearing and a bore that clears a bolt look identical on a print. Naming the mating part explains the intent behind the number.
- ☐ **Identify the datums — where the part is measured from**
The same feature measured from two different faces gives two different answers. Datums decide which one is correct.
- ☐ **Thread and hole callouts, including depth and whether it's through**
Thread size, class, depth and tapped-versus-clearance can't be read reliably off geometry, and a blind hole modeled as through is a scrapped part.

4 Notes and revision block

- ☐ **Sharp-edge treatment — break, deburr, or leave as machined**
Every cut edge gets some treatment. If you don't say which, you're accepting whatever the shop thinks is reasonable.
- ☐ **Marking — part number, logo, orientation arrow, and where it goes**
Marking is easy to add at setup and expensive to add afterwards. It also stops the wrong part being fitted the wrong way round.
- ☐ **Packaging or handling requirements**
If one surface must arrive unscratched, packaging is part of the job rather than an afterthought at the bench.
- ☐ **A revision block listing what changed and when**
It lets anyone holding an old print see what they're missing, and it's the record that settles which version a part was cut from.
- ☐ **Internal corner radii on machined pockets**
A rotating cutter can't produce a sharp internal corner. Model and dimension a radius there, or expect us to add one.

ASME Y14.5 is the US standard governing dimensioning and tolerancing, and ASME Y14.35 covers how drawings are revised and marked. Naming them on your drawing tells the shop which rulebook your callouts are written in.

How tolerances get handled here

Tolerances are reviewed per project. Ordinary work is made and verified in-house. When a drawing calls for something tight, the job goes to a partner who can supply a CMM report, which usually costs less than trying it twice. Tell us what the part has to fit and we'll tell you which path it takes.

5 If you have no drawing, say these instead

☐

Part name, number and revision

Matching the model filename, so the two can't drift apart.

☐

Material and grade

"Aluminum" is a family, not a material. If a specific grade matters, name it.

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Finish, and which surfaces it applies to

Finish is a real cost line and a real schedule line. It's the thing most often left off and then noticed at the end.

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Thread and hole callouts

Size, depth, and whether it's through. A blind hole modeled as through is a scrapped part.

☐

The few dimensions that control fit or function

And what each one mates with. Mark those; leave everything else to a general note. Tolerancing everything costs money and rarely helps.

☐

Anything you think might be difficult to make

Tell us early and we'll flag it before it's cut.

Not sure whether your part needs a drawing? Tell us what it mates with and we'll tell you. We reply the same business day, usually within the hour — Mon–Fri, 9am–5pm ET. · 7fabs.com/resources

RL-DL-003 · rev A
Not a quote or contract.