

Drawing Checklist

Use this to ensure completeness of your drawings. Remember that your drawing should be easy to understand and specify everything one needs to make or assemble the design. If you think something may be ambiguous, add additional details and/or notes for clarity.

- Views** are arranged in the correct (first/third-angle) **orientation**
- Hidden lines** are shown except where they obscure the view
- Tangent lines** are omitted unless needed for clarity
- All features of the part are shown in **true size** in at least one view
- Location and size** given for all features
- Features are **fully-defined** but **not over-defined**
- Critical** dimensions are **toleranced**
- Non-critical features** provided with looser tolerances
- Dimension and tolerance **precisions match**
- Precision of non-toleranced** (i.e. using title block tolerance) dimensions are chosen appropriately
- A **tolerance stack** has been performed to ensure that all tolerances selected are appropriate
- Dimensioning to **hidden lines** is avoided
- Center lines/marks** added for revolved and symmetrical features
- No dimension lines are **crossing**
- Dimensions are **placed outside** the view
- Quantity** (i.e. 6X) noted for patterns of features
- Use of TYP is **unambiguous**
- Reference** dimensions provided where needed or requested (i.e. overall dimensions)
- Diameter** symbols added to cylindrical bosses, holes, and arcs greater than 180 degrees
- Radius** symbol added to fillets, rounds, and arcs less than 180 degrees
- Material** (alloy, heat treat, and specification) noted on drawing or referenced in BOM
- Coatings** noted on drawing or referenced in BOM
- Location for **coating masking** (if any) noted
- Critical **finishes** noted
- Notes indicating non-obvious **critical/sealing surfaces** that must be free of scratches
- Basic **edge break** requirements are conveyed with a note instead of dimensions on the face of the drawing.
- Marking** instructions and location provided if required
- Geometric dimensioning and tolerancing** applied where needed
- Basic dimensions** are used where needed

- Have I given the machinist everything they need to make this part?**
- Is this drawing clear?**