

Do You Have a Quoting Process?

The only way to have repeatable results is to have a process.



Having a process is especially important when quoting precision machined parts; a flow or sequence of events that take place to ensure that production will go smoothly. What are the pitfalls that can get a shop into trouble? Following a process through the various individuals or departments, it will help to refine your quoting skills.

Five Key Areas To Consider

Material (Is it available?)

Can you get the material? Can you cut the material? Do you have expertise in the grade? Expertise, especially in high-temperature alloys, can make all the difference in a profitable and unprofitable job. Machinability of the material is an element that will affect all the other aspects of the quoting process.

Manufacturability (Can your shop make it?)

Do you have the expertise to machine the part? Look for special processes such as thread rolling, broaching, secondary operations. Do you have the tooling required? Also consider outside operations such as heat treat, plating, grinding or other operations. Does your network of processors have the expertise?

Resource Requirements (Does your shop have capacity to make it?)

Do you have the capacity to machine this part? Is the diameter out of your capability range? Is this quantity too large or too small for your equipment mix? Will this overburden you with your current capacity? When thinking about capacity think about both people and equipment. Do you have the staff to complete this job? Does the shop's team have the needed skills?

Quality Requirements (Can the shop check it?)

Look for special callouts and dimensions that are not standard. For instance, special pitch diameters on threads. Is it 2A after plate thread? Are you capable of holding

the dimensional tolerances? Look for close tolerance dimensions. Depending on equipment, I would say dimensions of ± 0.001 or smaller are close. If multiple dimensions are that close, it's important to keep in mind our capabilities. Think tool to tool repeatability over time.

Financial Concerns (Will it break the shop?)

Is this an existing customer? Do they pay on time? Is this a new customer? Are they creditworthy? How will this job affect your overall product mix? Will this make the shop too dependent on one customer or one industry? When analyzing quotes, you should be thinking about how it affects the business. A huge job is great, but if it becomes 50% of total sales does it become too risky? If large capital outlays must happen to meet production demand, then contracts need to be in place to protect the company in the event a project does not go forward. If a quality issue arises, can your company afford to scrap 5%, 10% or 50% of these parts returned from a customer? War gaming the worst-case scenario will help anticipate if major financial blunders occur.

Even though I have showcased five key areas, the steps really get streamlined in the quoting process. The questions presented are just a primer to get started. Develop questions that fit the application. Have a step-by-step process to follow that asks eliminating questions before moving forward with a quote. "Is a part too large?" is a possible eliminating question. The quoting process should be built out just like setup sheet. Quoting is often represented as too complex to be broken down, but I think the only way to have repeatable results is to have a process. Do you have a process? **P**

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