

Ten Questions to Ask Before Buying a Mold

You may have found good tooling suppliers, but there continue to be problems with sourcing molds. Here are some tips that you may find helpful if you have to get a mold made either onshore or in China.

There have been concerns in sourcing molds from China over the tool design and quality. The views are:

"Chinese tools cut major corners on water, tool steels, unless you really get after them."

"Chinese tools warp in the press because their tools are the softness of lead."

"There are well-made Chinese tools but the materials used have been sub-par."

"Delay in communication is an ongoing problem."

"You have to manage China because if you don't, China will wreck you. Manage it or don't do it". "There are key issues that you need to understand. First, quality control is critical. Stuff goes on in China that wouldn't happen in North America/Europe. Second, you have to understand the business culture there. And, third, you have to, to some degree, accept the quality standard of 'it's not perfect but it's good enough'."

Most of those complaints have been expressed for many years. Frankly, these concerns apply universally and are not location-specific. Chinese mold makers are not different from the American or European mold makers, in terms of manufacturing capabilities or business acumen. It is actually a matter of your identifying the right mold maker, whether onshore or in China, and communicating your needs well. You need to purge yourself of prejudices if you want to do business globally.

A well-qualified mold maker in China can bring much value to your sourcing needs; he/she would build your molds to the required specs, conform to International Industry Standards and to your standards, will try and test the molds well, and ship these in time.

Ensuring Success

If you want to be successful, you need to get aligned with the right mold makers. The following questions should help you to identify the right mold maker:

1. **What is the landed price to my factory?** There are extra costs involved, including charges to bring the mold from the mainland to Hong Kong. Be sure you know what those costs are upfront. You may ask for the actual landed price at your location.

2. **Is it understood that the purchase order is for the tool to produce good parts, not just samples, for X years?** Let the mold run and be tried under simulated conditions before it is shipped. Get the mold maker to supply samples and reports as required until you are fully satisfied. If necessary, you may get the sampling process video-taped.

3. **Who covers the freight costs from China?** Again, spell this out from the beginning. The tool might be cheap, but costs can start adding up.

4. **Are the mold components used available locally?** This is becoming more and more common since the major mold component suppliers such as Progressive and D-M-E have established their own facilities in China. You may however like to spell it out on the PO that the BOM [bill of materials] has to be approved prior to mold build. You want to be able to buy spares, and better yet, have them make your spares there.

5. **Does the purchase order include all CAD files required to make domestic changes to the mold?** Make sure you have the entire CAD file, when you go through and make changes, and these are translated to the file. Everyone does this, not just China, where the mold builder has to groom your file to make it work. This however, needs to be approved by you and updated in your file records.

6. **Have the CAD files been updated to reflect the actual tool being shipped?** Does your CAD file actually reflect the part being made? What did you change during sampling and what are the latest dimensions? The electrodes belong to you so you need those packed in with the tool, along with anything special used to make the tool. You need to ask for it to be shipped with the mold.

7. Was the tooling sampled in an equivalent press to the one in which it will run at your facility? You really want to know in what machine you are going to run the mold. Some of the mold makers are just sample houses. They may be throwing your mold in a 400-ton press because that is the one that is open whereas you are going to run it in a 220-ton press. The press does not have to be the same exact brand but it needs to be same tonnage, pressures, and shot size.

8. Did the tool run for 24 hours or just long enough to get samples? Not every mold needs to run for 24 hours but running it is a good test of how the mold operates. As the mold settles in, things can change. You may request that they use specific resins for sampling. If you do not trust the resin available in China, you may like to spend the money and send the resin-material to manufacturer.

9. Are the parts on the runner, and not groomed? That will tell you a lot.

10. Is this mold for use in China or in North America/Europe? When you are making the tool to bring back to your facility in North America/Europe, you need the tool that you specified, which is why the details are important. You have to know what you are getting into or you will not get the mold you expect.

What they had to say:

Industry Week: "Surveys indicate that anywhere from 17—53% of customers have not realized business value/ROI from offshore outsourcing."

KPMG: "Fifty-eight percent of organizations surveyed could not confirm that outsourcing had clearly improved financial performance. Ninety percent of custom organizations didn't accurately understand the opportunity costs of the selection process and 79% of such organizations couldn't accurately identify the internal financial cost of the sourcing selection process."

This is where a company like Navitas comes in. You can be successful by aligning yourself with the right mold maker, who takes care of all issues, takes no shortcuts, takes nothing for granted, and provides you exactly with the mold you want. Navitas Operational Excellence makes the Mold buying process much simpler without you having to invest in any additional resources.