

Having trouble viewing this email? [Click here](#)

You're receiving this email because of your relationship with Industrial Molds, Inc.. Please [confirm](#) your continued interest in receiving email from us.

You may [unsubscribe](#) if you no longer wish to receive our emails.



Industrial Molds Group



Industrial Molds, Inc. Newsletter

September 2010

Know the True Cost of Your Molds

Price vs. Cost. You may know the "price" of the molds you buy, but do you truly understand the "cost" of the molds you purchase? Many times, especially in cases where procurement people lack an engineering background, they may not understand that the "price" of a mold often doesn't accurately reflect the true "cost" of that mold. This is an important consideration when purchasing injection molds and can make the difference in a high-efficient production mold that reduces the unit costs of your parts, or a poorly designed mold that runs inefficiently and ultimately increases your overall cost-to-manufacture.

An injection mold (or any type of mold) is actually a complex piece of machinery used to produce complex plastic parts that go into all types of other products from automotive engines and fuel systems to medical devices to myriad consumer products. Each of these parts and the molds that make them must be highly engineered, typically in collaboration with the OEM's tooling engineer, the molder's processing engineer (if different from the OEM), and the mold manufacturer's engineering team.

There are many ways that a mold can be constructed, depending upon 1) production requirements [how many parts annually will be needed from that mold] which will determine the number of cavities; 2) the type of material used for the part; 3) the complexity of the part [side actions, core pulls, unscrewing mechanisms, etc.]; and whether or not some required secondary operations will be done downstream outside the mold, or in the mold using a rotating core [in-mold labeling, decorating, assembly, coating, etc.].

Even a seemingly simple, single-cavity mold can have complex features that make it a more costly mold to design and build. Industrial Molds Group vice president, Tim

Peterson, says, "Price is what the mold costs you today. Cost is the cost of ownership of that mold over a period of time".

This issue became major about a decade ago when going offshore for molds was common. The main reason cited by our customers was price. "Today, we're seeing that several front-runners - those who were first to leave the country for their molds - have finally figured out the true cost of ownership of their offshore molds," says Peterson. "Yes, the price was attractive - but there are other issues, such as the long term servicing of the tools -- you don't send them back to China for repair and maintenance and ECOs. For that you need local support."

While the offshoring of mold builds has slowed as more and more big OEMs realize the cost, there are still some companies that only consider price, but do not calculate the true cost of ownership.

Over the past decade, U.S. mold manufacturers have seen increased competition from Asian mold makers that promote their ability to build molds for a fraction of the "price" of U.S.-built molds. At one time, the difference was significant - up to 50% less than the quoted price of a U.S.-built mold. Today, due to increased costs of shipping, engineering time, money spent traveling to Asia to oversee the project, and increasing wages in Low-cost Countries (LCCs) such as China, that difference has narrowed to something around 20%.

Molders would be better served to do a better job with their RFQs - be more stringent on design, validation, favor a U.S. shop, but if they do go overseas-they need to be aware of the possible quality differences.

Peterson adds that some of the issues that need to be considered are:

- Who will support any ECOs or repairs that need to be made to the mold when it is brought back to the U.S.? Peterson says that OEMs and molders need to realize the value of a local supply chain where quality can be verified, and you can meet the moldmaker face-to-face while the mold is being built. "There's real value there," he says.
- What is the unit cost of the parts you'll pay for a mold that runs inefficiently? (In molding, seconds are dollars! A few seconds shaved off the cycle time for a highly-efficient, expertly designed mold can mean thousands of dollars in savings!) "The price of the tool is insignificant compared to the cycle time savings molders can realize by buying a highly-engineered, efficient mold," says Peterson. "If you have to slow your cycle because there's not proper cooling in the mold, that's a direct cost to the OEM. If the cooling is not uniform it will create warp issues. How robust is the tool? It's all the little things that to less technical purchasers don't seem to matter. And if you're only shopping on price, you're missing the point. A better performing tool means your efficiencies are making your profit.
- Saving a few dollars on the mold at the front end might mean lost time-to-market for the OEM which can add up to hundreds of dollars lost in being late to store shelves or on a new vehicle model.
- Damage to your current supplier base. Every OEM needs a strong, financially healthy supplier base because the quality of the OEM's products is only as good as

the quality of the supplier's products.

All of this means that procurement personnel and OEM engineers have to carefully weigh "price" vs. "cost" when selecting a mold supplier.

At Industrial Molds, we strive to provide you with all the information that you'll need to compare not only our price against an Asian company's price but a U.S. competitor's price as well. We'll provide details about our mold design to show you how - in the long run - you'll save money in your overall cost-to-manufacture. We` welcome questions about our designs and the advantages that we can provide with an Industrial Molds Group-built mold.

In fact, we can make it easy for you to do a preliminary evaluation of "price" vs. "cost" through a comprehensive evaluation form supplied to us by the American Mold Builders Association (AMBA), of which Industrial Molds is a member. Just e-mail your request for "Know Your TRUE Costs" to Taryn at customer.service@industrialmolds.com and she'll be happy to put some in the mail to you. Or give Tim Peterson a call, he'll be happy to answer any questions you may have.

Let Industrial Molds show you how to increase productivity and efficiencies, while reducing your overall costs-to-manufacture. Contact us today at 815-397-2971 or visit our Web Site at www.industrialmolds.com



The Annual Industrial Molds Golf Outing was held September 18, 2010. Everyone who attended had a great time. It gave our employees a chance to relax and have fun. A BIG thank you goes out to our vendors who donated prizes that were given a way at the dinner held after the rounds.



Congratulations to Tom Sullivan, John Clarke and Kerry Smith for winning the

Engineering Corner

Early Involvement of the Moldmaker Leads to Big Savings:

Good molds that make good parts start with early involvement and collaboration between the moldmaker and the OEM's product design engineers. Greg Osborn, account manager for Industrial Molds Group, says, "The earlier we're brought into the program, the more efficient we can be. Many times what looks good on paper to a product designer, cannot - in reality - be molded in a cost effective manner or may not be moldable."

The engineering team at Industrial Molds has a history of working collaboratively with its customers to help them achieve an optimum product design that is moldable in an efficient production environment. We can tell you if you have a part design with features that will make the mold more costly to design and build, or increase the cycle times and thus increase the overall costs-to-manufacture.

"It's a lot more design intensive - which means added costs - when we have to make changes for moldability," says

Industrial Molds Golf Outing.
Let's see if they can keep
the title at the next outing.



Thank you to Jeff Noud and
Matt Montoya for organizing
this event !

Osborn. "Costs add up quickly when mold designers have to continually make part changes to allow for proper mold operation." This is especially true when working on engineering changes to existing molds.

When designing a new mold, parts are moved from CAD orientation and placed in die draw position. This new position is driven by features within the part to be molded. The part orientation needs to be considered when changes are being made to an existing part. By partnering with a toolmaker early on when working on engineering changes to current molded products OEM product engineers can save time and money by working within the current molded part orientation. Osborn points out that early collaboration is even critical for engineering change orders (ECOs). "We recently worked on some tools where we were running into some hard issues of trying to input a new version of a part into a current tool," explains Osborn. "If we'd been involved in the beginning of the process we could have developed the new part to accommodate the operation of the existing mold actions saving time and money for our customer."

It doesn't matter whether it's your proprietary mold design or someone else's existing mold design, Industrial Molds can, if brought in early, provide evaluations of a part change to help you make the change cost-effective and provide good productivity. "Getting the *right* mold maker involved early can help in keeping the overall tooling costs within budget and ultimately optimize productivity because the design is so much more efficient," Osborn concludes.

To further help with design optimization, Industrial Molds provides a mold filling analysis service that can help you determine whether or not the part you want to mold can run efficiently in a production environment. There are a number of mold-filling analysis programs available on the market such as Mold Flow™, VISI Flow™, and EPS FloTek™ that can help you determine an optimum mold and molded part design, and optimum molding conditions. The nominal charge for this added service is well worth it in the long run. Industrial Molds uses Moldex 3D for its filling analysis, and our customers find this service extremely helpful in the design stage.

A mold filling analysis can identify some conditions that might lead to problems if not caught early on in the

design process include:

- Thick-to-thin wall sections
- Gating in an area that might cause surface issues
- Flow lines, knit lines and other material flow problems.
- Designation of end to fill areas that may need venting inserts.

Collaborative efforts early in the program can improve time-to-market, reduce or eliminate the cost of changes to the tool, particularly if a problem has been discovered after steel is cut, and ensure that both Industrial Molds and our OEM customers are on the same page in achieving optimum production.

Sincerely,

Industrial Molds, Inc.

[Forward email](#)

✉ **SafeUnsubscribe®**

This email was sent to customer.service@industrialmolds.com by customer.service@industrialmolds.com.

[Update Profile/Email Address](#) | Instant removal with [SafeUnsubscribe™](#) | [Privacy Policy](#).

Industrial Molds, Inc. | 5175 27th Ave | Rockford | IL | 61109

Email Marketing by

