# **Guarantee Your Molds... Responsibly**

old building companies are experiencing more frequent requests for mold performance guarantees by their molder and OEM customers. With tightened budgets and increased accountability, mold buyers are looking for assurance that their molds will perform without any surprises. In some tooling applications where previously one million cycles were assured, the bar has now at times been raised to an expectation of three to five million.

The lack of an industry standard puts the mold builder at risk financially besides endangering the prospect for future business with the customer.

How does one protect one's company from exposure to costly repairs?

There are three aspects to being able to responsibly give written assurance to a mold buyer. First, a clear, written "rules of the road" must be agreed to by both parties. Secondly, an understanding of the conditions that the tool will be subjected to needs to be understood by all. Lastly, should there be unscheduled mold stoppages and a dispute over liability begins to brew, a mechanism for resolving the issue needs to be agreed upon.

## Put It In Writing

Some mold builders have a written warranty, but that is more the exception than the norm. The expectations are 'fuzzy'.

To address this, a draft of a Mold Warranty has been prepared, and is available for mold builders to review and tweak for their own use.

A prerequisite is that the mold builder recommends minimal increments for maintenance, and accordingly the molder documents all mold maintenance activities, while maintaining molding platen parallelism.

Custom inserts and custom components are covered by the mold builder, while purchased hot runner systems, components, and components exposed to abrasive materials are not.

Not covered within a warranty would be damage resulting from improper set up, incorrect plate sequencing, unapproved modification of the original design, damage from stuck parts, etc.

A Mold Warranty can be included with the mold builder's quote response. As a referenced attachment, it can be part of the condition of the sale. And rather than being viewed as a taboo topic during the initial customer-vendor "courtship", it



can convey to a mold buyer that the mold builder ultimately wants to be sure that the tool performs as planned, through the known responsibilities of all involved.

View this draft at www.procomps.com/moldwarranty to consider whether or not it can be applicable in some ways within your organization, be it as a mold builder or a mold buyer.

The ability of a molder to maintain its tools can be graded, preferably before a Mold Warranty is granted.

## Where's "Our" Mold Going?

Because there is a mutual interest in the mold's performance, the conditions within the molding plant deserve to be objectively understood by all.

Does the molder's tool room resemble a triage unit? Is it a firefighting culture? Is it a mess? Is the extent of documentation a scribbled "Fixed mold" in the tool's mold book? Do they subscribe to the practice of "Drive it till it drops... Fix it when it's broken."? If so, a mold builder must pause before signing on to responsibility for the tool's future performance.

However, if the maintenance repair technicians are trained and experienced, and if there is a documentation system that tracks scheduled preventive maintenance cleanings and root cause analysis is documented for all unscheduled mold stoppages, then a mold builder can reasonably assume that the mold will be treated as a valuable member of the molder's fleet.

#### How to Judge

A mold builder can directly assess his customer's tool room. If a mold builder, specializing in new tooling, is not confident in his own knowledge of maintenance practices, a staff addition might be justified for a mold maintenance expert. Production Scheduling & Mold Status Process Documentation, Last Shots and Samples PM Scheduling and Maintenance Culture \*Maintenance Documentation Practices \*Systemized Maintenance Practices (8 Stages) \*Shop Metrics (design, machines, tech skills, etc...) Efficiency Improvement Goal Setting, Internal KPI's



If the need for maintenance expertise is occasional for the mold builder, specialists can be accessed on a per project basis.

**Overall MCA (Best Practices) Score** 

\*TD Shop Designation Level

Either way, a Maintenance Capability Assessment, or MCA, is what is used to determine a company's mold maintenance capability. It accurately and objectively determines a company's ability to maintain its molds to a high degree of production readiness, reliability and performance, and rates a shop's degree of proficiency compared to industry standard best practices.

A company's maintenance capability score is a rating based on a thorough examination of its preventive maintenance infrastructure using a systematic set of review tools.

When an MCA is performed, everything related to mold maintenance must be examined. Dozens of molding and shop floor methods, procedures and documentation practices need to be observed, scored and then categorized into Key Performance Indicators (KPI's). These can include:

- Production scheduling
- Process documentation (last shots and samples)
- PM scheduling & maintenance culture
- Maintenance documentation practices
- Systemized maintenance stages practiced?
- Shop metrics

• Efficiency improvements, goal setting, internal KPI's

The KPI's can then be factored into a scoring template and, based on this, an overall MCA score can be assigned.

While it is best for an MCA to be performed prior to a warranty being granted, it is also available as a remedy for resolving a problem, and agreed usage of a third party to conduct the assessment can help the molder/mold builder relationship remain positive.

Is the molder's tool room a mess? Or is it an organized team trained to maintain its fleet of tools?

### **A Current Need**

Years back, tools were generally more straightforward and relationships were strong between the custom molder and mold shop owner.

Now, injection molds are increasingly more complex, with some ranging in price from \$300,000 - \$600,000. Liability for a product of that cost is huge. A verbal "if there's a problem, we'll figure it out together" just won't cut it with a mold buyer who doesn't have costly repairs budgeted.

Tools are available to assist mold builders with taking a vested interest in their customer's tooling investment. To do so – responsibly – can separate one from the pack.

#### CONTRIBUTOR

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