



Dr. Die Cast



World Class, Brick and Mortar or Blood and Spirit?

One thing that has surprised me every few years is the beautiful state-of-the-art facilities that are built with the best of everything and then almost as quickly as they appeared, they are listed in a liquidation auction flyer! With all that beautiful state-of-the-art machinery, building and equipment how could they fail, what happened?! Now I'm sure we could consume a lot of beverage into the wee hours of the night debating the root causes but I would like to pose my thoughts.

People make the difference, but then so does leadership. A number of years ago I was told that the "people" (that is operators, set-up, maintenance etc.) of a certain shop were incapable of ever doing quality work. Even though all the equipment in the shop was less than eight years-old, it was clear that the shop was certainly performing poorly with high scrap (greater than 30% overall) and lots of machine downtime (30%+ downtime). Yet six months later, these very same people were producing at less than 5% scrap at 79% utilization. What made the difference? Unquestionably, there were mechanical repairs and maintenance, but the majority of the improvements came from training

and procedures. There is an adage that "to err is human, but it takes a computer to really mess things up." I would take that one step further and state that "operators don't have the authority to mess things up; only management has the authority to really mess things up."

We all manage something. If we are in engineering, sales, manufacturing, maintenance or supervision, you are a manager. Our machine operators live with our decisions every day. Our decisions might seem minor to us, but they can have far reaching consequences. Take for example, deciding where to place a water line in a die. Seems routine, but thermal control is critical to not only cycle time but part quality. How about specifying the height of a furnace? What difference could an inch make? I was preparing to order a new remelt furnace and I wanted to make sure it could be cleaned without requiring the furnace operator to stand on a platform. The furnace operator explained that one of his four furnaces, "hurt his shoulder when he cleaned it." We measured the sill of the furnace and it was only 1 inch higher than the others. The difference of one inch made the difference not only in his efficiency but kept him from having to endure shoulder surgery!

New machinery is nice but I am more concerned about the care and maintenance of the equipment ... and the skill of the operators and support staff. One of my die casting customers was another die casting plant. Their plant had the newest of everything. They had "outsourced" their new part numbers for the next model year to me to run while they supported their current part numbers. When they started running the new dies in their machines, their scrap was so great they couldn't keep up and transferred the dies back to me. They came to my plant to observe and study the process that we were using. They were amazed to find their dies running in very old machines. As one of their managers exclaimed, "Those machines are older than I am!" The machines were very well maintained and some of the systems had been updated in order to achieve the necessary parameters. The skill of the entire staff: operations, maintenance, operators, setup and tooling were all necessary ingredients in the success of that die casting plant. Take a look at your plant and the people in key positions. Chances are their skills and performance has a far greater impact on your success than you realize.



Who's Dr. Die Cast?

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