N O T E S F R O M T H E R O A D BY PAUL NUGENT, PHD MENG



World's Tallest Statue of Hindu deity - Murugan at Batu Caves in Malaysia

272 Steps

It's a long walk up to see the limestone Batu Caves in Kuala Lumpur, but worth it. The huge complex consists of three large caves and several smaller ones etched over millennia from the soft rock. The cavernous chambers offer cool respite from the humid atmosphere outside and were once a source of guano for fertilizer for local Chinese merchants. Nowadays the main Temple Cave contains Hindu shrines which are a focal point for pilgrimage and annual festivals. The giant statue is a relatively modern addition but creates an impressive atmosphere at a very special place.

A Level of Care

Orla operates four assisted living senior care facilities here in the US taking care of over 170 senior citizens. She has differentiated her business from the rest of the market by offering a series of levels of care for her residents based on their needs. This '7 Levels of Care' approach enables her staff to modify the amount of time and resources needed for each person based on their individual needs. Healthy, independent residents may only require a Level 1 approach while someone who needs a lot of help may be considered a Level 7.



"The level of care depends on the complexity of your part and scale of your operation."

This flexibility allows for more accurate resource allocation, planning and costing.

I was reflecting on how this applies to rotomolding. On a recent visit to a small mid-West company I was fascinated to see that they basically produce one part per day (yes, only one – maybe two if they are busy). Of course, it is one very carefully molded and high quality part. No hurry or rush. The parting lines are clean, the oven is clean, the part is clean and it is the focal point of the day. The level of care that they apply is high, very definitely a 7 on Orla's scale.

At the other end of the scale – in terms of volume – consider a molder who produces more than 17,000 parts per day. The level of care is still high, probably a 5-6, but the time devoted to each is obviously much shorter as the parts fly off the machines. The parts are simple and their system has been engineered to remove as much labor and judgment as possible but the key points of care still remain and are closely managed by the operators and supervisors.

In between these two production extremes there is a myriad of molding operations established with varying levels of care where the balance between part quality, fast output, cost and mold maintenance can produce conflicts. They include proprietary molders making simple dry-blend parts with no particular quality concerns; OEM molding operations connected to complex assembly lines producing their own parts; high-end kayak makers; and custom molders with a Heinz-57 mix of parts. Rarely do they achieve the goal of high quality, fast production, low cost and first-class mold condition - there is usually some degree of compromise.

Are there seven levels of care necessary for rotomolding? Probably not - the number will depend on the complexity of your parts and the scale of your operation. However, cost, speed or quality will normally dictate the levels required. It's possible to have all three but this requires a lot of resources and careful planning. Without giving production the resources and time to plan, the most common tradeoff that I see (unfortunately) is mold care. It is all too often overlooked as an essential part of an operator's long list of tasks. A production planner who simply fills slots on an arm with as many molds as possible or demands faster cycles to increase output without fully considering all aspects of mold servicing is creating a time-bomb.

When operators have to rush to complete an arm in-cycle without paying attention to parting lines, clamps and vents there may be short-term benefits with faster output and maybe a little extra flash. However, over time, this neglect can lead to serious part quality issues and even expensive mold repair.

Take a look at your molds and operator service times. Is there reasonable time available for proper mold care to take place? Are they focused on this and do they understand the implications for the longer term? Are you seeing deteriorating part quality? Are you adding downstream repair stations to compensate for issues that could be addressed at the machine? If so, it may be time to add a level of care.

Niland Company

Rotationally Molded Plastics

Your Source for Any Plastic Hollow Product Shape Up to (95" diameter) and No Matter How Intricate.

1-800-648-9013 Toll Free Fax 1-888-779-3065

320 N. Clark, Dept. JT, El Paso, Texas 79905 International Calls: Tel 915-779-1405 Fax: 915-779-3618 www.nilandco.com tom@nilandco.com

