



Bel Air's finishing touch

Machinists and manufacturing engineers are familiar with this scenario: They use a CAD-CAM program to design a part, then program it into a CNC machine. The specs are all correct, but when the part is completed, it doesn't fit right. It has burrs, or the finish isn't correct in some other regard. So this sophisticated part – created on sophisticated machine – now has to move to the decidedly unsophisticated process of hand bench work. This means much slower productivity and creates a bottleneck for completing parts.

This is where Bel Air's mass finishing processes comes into play. Instead of sending a part to a finishing department for hand bench work, a machinist can instead pull a part out of the CNC machine and utilize Bel Air's mass finishing equipment to create a perfect finish in the part – product finishing, deburring, or mass polishing. The bottlenecks are eliminated and those slowdowns are dramatically reduced.

"Because of the size and speed of our equipment, it can be placed right within the cell. The CNC operator takes the part out of the machine and puts it directly into the finishing and cleaning equipment," said Jim Rubino, Bel Air Vice President – Sales and Marketing. "It gets as close to lean manufacturing as possible."

Bel Air, based in North Kingstown, RI., specializes in process technology for parts of every size, shape and material. They work with customers to develop customized solutions for their exact needs, asking specific questions about throughput, the capabilities and capacity of their plant, the tolerances required

for the part, and so on. They create a process and test it out in their processing laboratory, then return the part to the customer with a proposed solution based on the lab results.

"In the old days, you'd go buy a cookie cutter solution to a deburring problem. You'd go to a local distributor, who sells whatever range of machines, and you'd try to do your thing within the parameters of those machines," Bel Air President Steve Alviti said. "We don't just take the orders for machines – we are presented with a customer's problem, and we work to find the solution to the problem."

"We sell process technology," Rubino said. "Two manufacturers could come to us making the same exact product, but we might find them totally different solutions to their exact same product due to the specifications within their specific facility – including their culture, their approach to doing things and so on."

"The main markets we've been involved with are firearms, medical/orthopedic, supporting machine shops and cutting tool manufacturers and users," said Rubino. "In particular, firearms and medical have really fueled our growth, and despite what seems to still be a downturn in the economy, we've really been doing well over the last few years."

Alviti also notes the Bel Air is the only company doing this type of work in the U.S. "Our competitors are typically from Europe. What's been our advantage is our agility. Our lead times are much quicker and we give added value of systems integration"

Bel Air is currently seeking prominent CNC builders or suppliers who are interested in offering their technology as a part of a package option with their machines. They are interested in pursuing relationships like these with builders or suppliers of cutter grinders and other related equipment.

Interested companies can contact Bel Air at 401-667-7902, or info@belairfinishing.com