

Machining

KYOCERA SGS Tech Hub's President Discusses Optimized Machining Challenges

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5 Questions With Jason Wells

1. How can the KYOCERA SGS Tech Hub provide an optimal solution to each unique customer challenge?

Like a fingerprint, every machining application is unique. Therefore, making blanket predictions for each customer is challenging. With such a complex series of engineering relationships working together simultaneously to machine a component, there are far too many variables impacting the overall outcome of an application. An optimized solution tailored to unique machining events in specific facilities with their own set of specific variables requires a specialized approach.

2. What are some examples of the unique complexities that your customers are facing?

These would include (but are not limited to): tool holding, part fixturing, coolant; pressure, flow, position, concentration, material, processing, spindle; interface, rigidity, substrate, geometry, coating, programming, paths, parameters, engagements, temperatures, air pressure/quality, maintenance, torques on various assembly points. Each unique application must be diagnosed and treated on an individual basis utilizing available resources, education, technology, and experience. Just as a doctor individualizes treatment for each patient, the same philosophy should be applied in order to completely optimize each application. This is how the most cost-effective highest performing solutions are realized.

3. How has the ever-changing cutting tool industry impacted your organization?

This has been witnessed through the evolution of our product portfolio. For many years our industry had a one size fits all mentality of a standard 30-degree helix, standard rake and clearance configuration. This was your geometry for steel, aluminum, titanium, or every other material encountered. As often occurs, industry matured, forcing aspects of the complex engineering relationships within machining to reinvent themselves. This has a domino effect on all the variables associated, thus forcing us to evolve our designs.

4. In what ways has this shifted the mindset of how KYOCERA SGS Precision Tools designs cutting tools?

As technology evolves, so must our processes. Cutting tools are no different. This is a new way of thinking for KYOCERA SGS and can be of tremendous benefit to the industry. Like a race team engineers race tires to optimize performance, the same mindset must be applied to win in a machining environment. While manufacturing tools on a large scale is effective, it has presented an opportunity to treat each customer's challenge with the individual attention it requires.

5. How can the KYOCERA SGS Tech Hub ultimately advance the future of the tooling industry?

The market is more sophisticated, technologies improve, global competition is constantly evolving. The analyzation of each application, recognizing the unique variables that can impact that application and applying a customized tooling solution is a vital competitive advantage that KYOCERA SGS Tech Hub

can now provide. KYOCERA SGS is taking advantage of this unprecedented technology to not only deliver a tool, but a well thought out and unique solution. We strive to strengthen the chain of engineering relationships and apply our knowledge to dynamically address each challenge. We are evolving from a one-size-fits all approach to a multi-dimensional solution-based approach. The special tools of today help inspire the evolution to the standard tool of tomorrow.

For a quick tour of the Tech Hub facility in Virginia, watch this short video.

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