



HONORS PROGRAM WINNERS

After each Top Shops benchmarking survey, I examine what we establish as the top 20% benchmarking group in order to choose an Honors Program winner for each of the four survey categories. I comb through survey responses, websites, blogs, social media channels and other resources that indicate a shop's strength in a particular category before chatting with them to learn more.

- **MACHINING TECHNOLOGY:**
STRATON INDUSTRIES (straton.com)
Stratford, Connecticut

While each of these companies certainly excel in their respective categories (as you'll read in this article), all of them are also strong in other areas of their businesses. (They are "Top Shops" after all.) For example, Straton has a wealth of in-house machining and manufacturing capabilities to be a "one-stop" shop for customers, but it also has a robust training program.

COMPLEX PARTS FAST

That's **STRATON INDUSTRIES'** business strategy in three words, says David Cremin, company president.

What's Telling About This Year's Top Shops

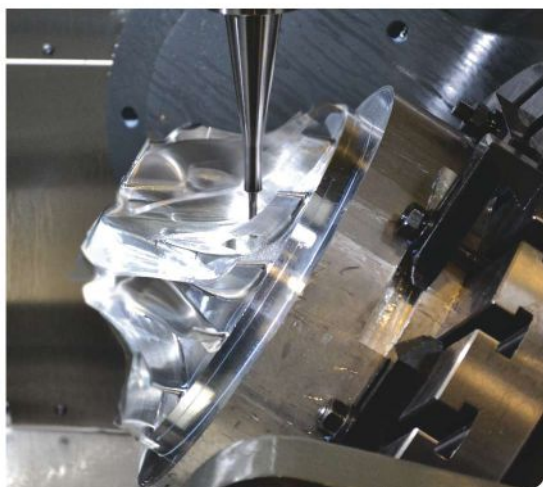
Here, the 2019 Honors Program winners explain strategies they've used to help them become successful U.S. machining businesses. Plus, you can learn more about them by attending next month's Top Shops Conference.

DEREK KORN | EXECUTIVE EDITOR

Founded in 1961, Straton has a wealth of machining and manufacturing capabilities. "We have a big array of precision equipment because we want to be a one-stop shop for our big customers, many of which are in the aerospace industry," Mr. Cremin explains. "This helps us maintain control over all aspects of a customer's work in house. That's how we achieve the speed to turn challenging jobs in short order."

Straton, which is ITAR registered, certified to ISO 9001:2015 and AS9100D, and is a Federal Aviation Administration-certified repair station for helicopter and fixed-wing aircraft components, updates its technology annually. The shop invested \$1 million last year in new machine tools and supporting software and is close to investing at that level this year. "We read what our customers are looking for and needing machining-wise," Mr. Cremin says. "We also buy according where we feel pressure to add to our already extensive manufacturing capabilities."

To that end, the shop is not married to any one machine tool brand. "We look for specific equipment characteristics we can capitalize on," Mr. Cremin explains. "Having a mix of machines and capabilities is important to being flexible



TOP: Straton has a range of ancillary capabilities such as stamping, engraving, welding and heat-treating capabilities as well as an array of inspection equipment.

BOTTOM: The shop invested \$1 million last year in new machine tools and supporting software and is close to investing at that level this year. Photos: Straton Industries

46-inch-diameter capacity. The shop also has stamping, engraving, welding and heat-treating capabilities as well as an array of inspection equipment. It is currently considering adding a horizontal boring mill, sensing opportunities for that type of work, and likely will purchase a larger VTL at some point soon.

At least a half dozen of its machines have spindle touch probes. Straton has started retrofitting machines that were not purchased with probes, and new machines it purchases are often ordered with probes. They are primarily used to speed and simplify setups and perform in-process measurements. “As an experiment a few years ago, we ran the same job on two machines, one with a probe and one without,” Mr. Cremin says. “The machine with the probe turned that job significantly faster than the other, so that sold us on this technology.”

The shop also has a large-format 3D plastic printer that it chiefly uses during the quoting process for new jobs. “Looking at a CAD file of a complex part is one thing, but it’s another to actually hold a part in your hands and study it,” Mr. Cremin explains. “It helps our machinists and inspectors determine optimal ways to approach the job, design fixtures and so on.”

Mr. Cremin says the shop discovers new technology from a few different sources. One is trade publications such as *Modern Machine Shop*. Another is industry trade shows including IMTS and Eastec. The shop also visits its customers to see what equipment they are using or considering. “Ultimately, we ask ‘Does this make sense for us?’ when evaluating new technology,” Mr. Cremin notes. “If we feel it does, there’s a good chance we’ll pull the trigger on it.”

and accommodating. Because this can present challenges for our shopfloor employees, though, we try to stick to FANUC controls and use SolidWorks and Mastercam for part design and programming throughout. That makes having a machine mix doable.”

Straton’s equipment list includes HMCs; five-axis machines; wire and sinker EDMs; jig, surface and cylindrical grinders; and VTLs to