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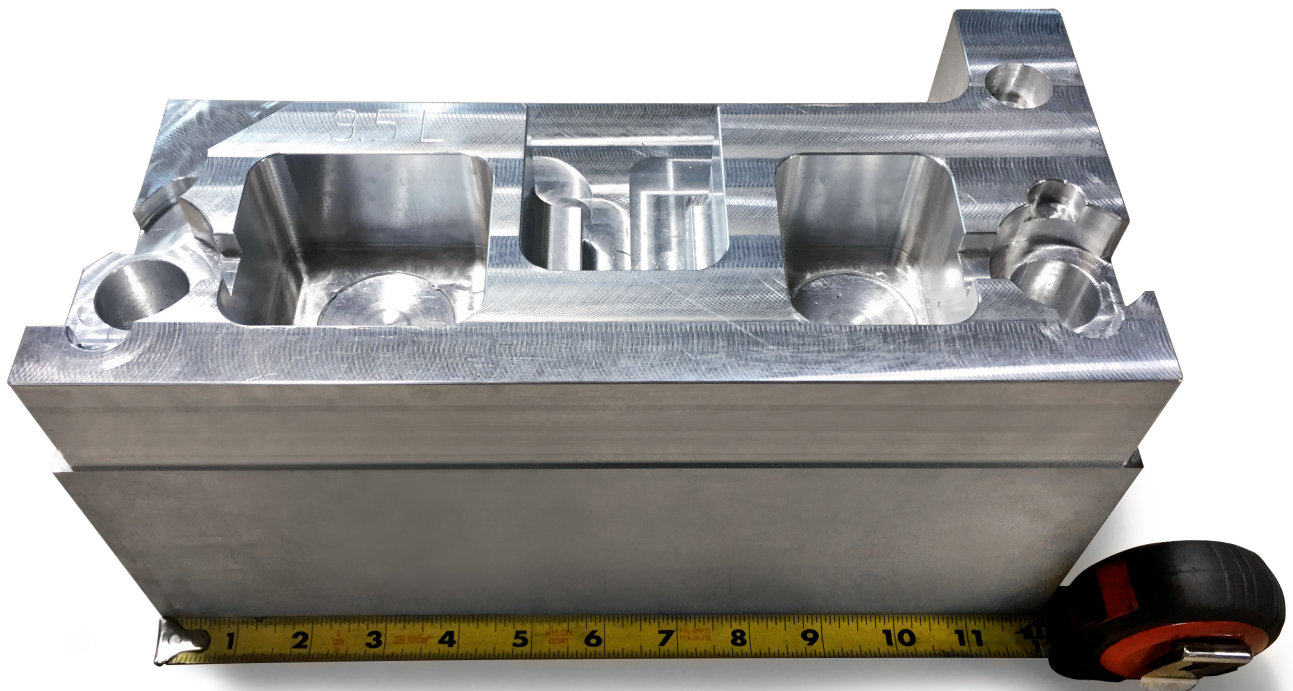
## A Cut Above: PRC Radius Cutter Helps Auto Part Manufacturer Boost Productivity

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U.S. auto sales rose for the seventh consecutive year in 2016. Autodata Corp. reported auto sales of \$17.55 million in 2016, 0.4% higher than 2015. Low gas prices, rising employment and low interest rates have contributed to consumer confidence in the past year, according to Reuters. The appetite for new technology – such as backup cameras and automatic emergency braking systems, has also promoted greater demand for new vehicles. In order to keep up with the increasing needs, U.S. auto manufacturers have been strict about meeting consumers' time constraints. Efficiency and productivity have become more essential than ever before for both auto manufacturers and auto parts manufacturers.

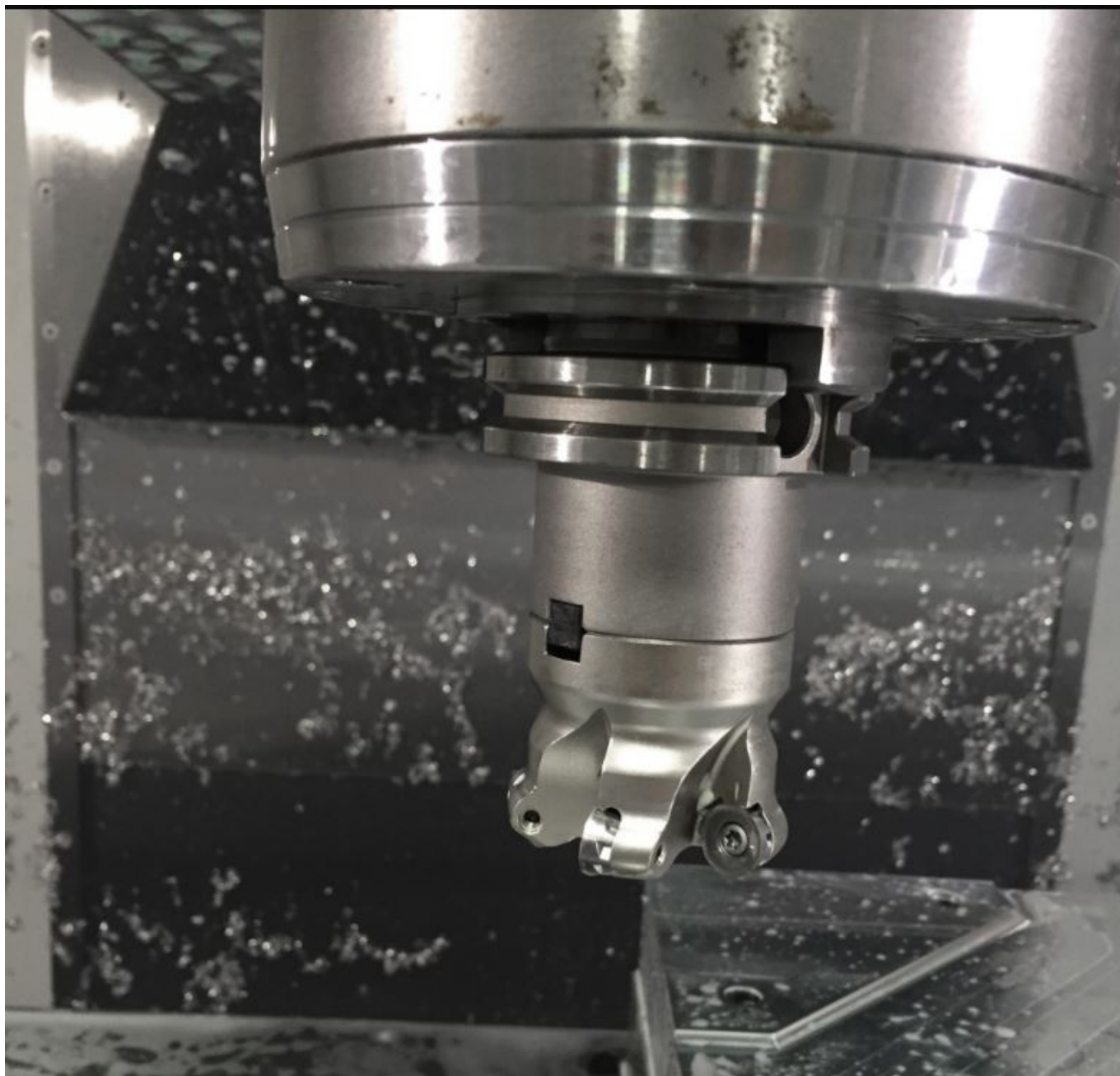
Micro Technology is an auto parts manufacturer located in Tullahoma, Tennessee. After years of experience as a machinist, the owner, Charlie Wright Sr., started the company in 1987 with just three mills, three lathes, one radial arm drill and one band saw. Thirty years later, his son, Charlie Wright Jr., inherited the company to continue to provide precision machining and fabrication services to the manufacturing industry.

Micro Technology's core service includes the manufacturing of parts that are used to mount to automotive engine blocks to be robotically transported through assembly lines. They produce various models and quantities annually. These parts are two-part sets that are machined and then assembled, which require additional time before they can be shipped to the customers. While the soon-to-be owner, Wright Jr., focuses on quality and accuracy of his products, he also strives for improved efficiency and productivity. He was in search for ways to reduce machining time to meet strict time constraints of his customers, so he reached out to his tooling agents DGI Supply and **OSG's** district manager, Philip Woody.



Micro Technology manufactures aluminum parts used to mount automotive engine blocks to be robotically transported through assembly lines.

Micro Technology uses a HAAS VF-3 vertical machining center with a CAT 40 taper tool holder. The part being machined is 6061 aluminum alloy and the tolerance requirement is  $\pm 0.002''$  to achieve the precise geometry and finish the company needs. Wright Jr. used to machine the parts with a competitor face mill that ran at 3,000 RPM, 120 IPM with 1.25" axial and 1.2" radial depth of cut. He wanted to improve productivity without sacrificing quality and accuracy. Upon a careful evaluation of the application, Woody recommended **OSG's Phoenix® PRC** indexable radius cutter (EDP #7800404) with 12mm diameter aluminum grade inserts (EDP# 7811013).



OSG's Phoenix PRC radius cutter

OSG's Phoenix PRC radius cutter is a highly versatile series of button insert end mills and face mills for contour milling applications (***watch the short video below to view it in action***). The PRC features an insert rotation notch where the number of cutting edges per insert (4 or 8 edges) can be selected by changing the depth of cut. Chip ejection is improved with wide chip pocket geometry. Its large body relief further supports three-dimensional machining.

The PRC ran at 5,780 rpm and 345 ipm, surpassing speeds and feeds of the competitor tool. Micro Technology was able to reduce the machining time by approximately 25 minutes per part, achieving a 50-minute reduction per set. In addition to the machining time, the company was able to improve the surface finish with OSG's PRC.

"This tool (the PRC) was extremely instrumental in achieving our required tolerances and meeting delivery deadlines of my customers," said Wright Jr.

Wright Jr. is excited for his new journey as an owner with reliable tooling to support his needs to reach even greater heights.

*Previously Featured in SHAPE IT Magazine.*

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