

## Auto Parts Manufacturer Saves Over 60% with EMUGE-FRANKEN Made in U.S.A. End Mill and Rigid Chuck Solution



Variety of Shifter Parts - SB Dezigns uses EMUGE-FRANKEN TOP-Cut VAR End Mills and FPC Milling Chuck to save over 60% in manufacturing costs on these automotive parts.

SB Dezigns in North East, Maryland has successfully implemented EMUGE-FRANKEN TOP-Cut VAR End Mills and a FPC Milling Chuck to save 62% in costs on a high performance shifter part machining application for the racing industry.

Established in 2003, SB Dezigns is a full-service precision production machine shop and tier-two automotive supplier.

Beginning as a home-based machine shop, SB Dezigns' dedication to superior craftsmanship and customer service has been integral to its growth, requiring a move to a larger facility.

Billy Crabtree, Owner and CEO of SB Dezigns, takes great pride in his larger, state-of-the-art machine shop. "It is very

important that we keep evolving with the latest and best technology, and that includes the cutting tools," Crabtree said. When Crabtree and his team encountered long cycle times milling stainless steel automotive shifter parts, they sought out a way to reduce time and free up resources for other machining projects. Crabtree said, "We were having excellent results with versatile EMUGE MultiTAPs, so we were all ears when EMUGE and our local distributor W.C. Chapman suggested we try an EMUGE-FRANKEN end mill solution for the manufacture of the shifter parts." At the time, SB Dezigns was using a couple of different brand end mills and was not optimizing the milling process.

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Sales Representative Bill Anderson from EMUGE's local distributor W.C. Chapman (L), and SB Dezigns Owner and CEO Billy Crabtree (R) at the SB Dezigns (North East, MD) precision production machine shop.

"We knew we had a winner with EMUGE taps, but were unfamiliar with their end mills," said Crabtree. "However, we did know that when we use EMUGE cutting tools, we are getting more than just the tools - we are getting an engineering partner that works closely with us to ensure our application success." For the shifter parts, EMUGE recommended and tested its TOP-Cut VAR End Mill and FPC Milling Chuck solution, as well as more aggressive feeds and speeds on the vertical CNC machining center.

Combining flexibility and high performance, the standard length TOP-Cut VAR End Mill with corner radius is made from premium solid micro-grain carbide with ALCR Coating, TOP-Cut VAR dampens vibration, increases feed rates and can be used in nearly all materials and milling strategies due to its special geometric properties. EMUGE-FRANKEN TOP-Cut VAR End Mills are manufactured at EMUGE North American headquarters in West Boylston, Massachusetts following strict engineering guidelines from Germany-based EMUGE-FRANKEN. The EMUGE FPC Milling Chuck provides a critical part of the solution, offering unprecedented rigidity, vibration dampening, concentricity and optimal pull-out protection via a pin lock collet system to enable faster machining speed and longer tool life.

The EMUGE solution was a clear success. Crabtree said that in addition to reducing cycle times, they gained longer lasting end mills which provided them with over 60% cost savings on shifter parts manufacture. He continued, "With the EMUGE end mills and holder combination, we are able to save over 30 hours of machining time and more than \$5,000 for every 500 shifter parts we manufacture," he said. "And I don't have to wait for my tools - they are locally stocked at our distributor."

