Newsletter

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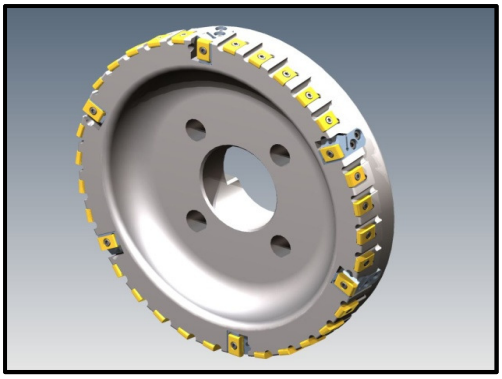

FIG. 1

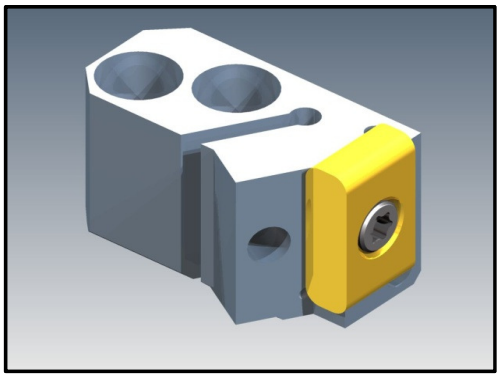

FIG. 2

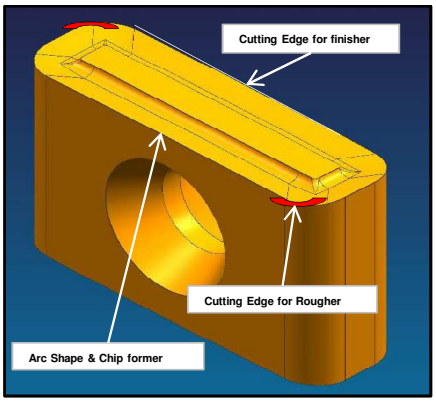

FIG. 3

The new **"GOAL"** mill for finishing of cast iron surfaces will be introduced as a standard product in selected standard diameter sizes very soon. Prior to this introduction, we have had a number of very successful installations

One of these was at a diesel engine manufacturer in the mid-west. Jack Devones & Brian Shoning came across an application of the deck face surface on this customer's cylinder head.

This particular surface had a flatness tolerance and a surface finish requirement that was extremely tight. The customer had already made 26 different attempts with 3 different milling cutter manufacturers. None of these manufacturers could make the specifications without a lot of "tweaking" on their cutters.

Jack talked with the engineers at Master Tool and, using the "GOAL" mill technology, they designed and built a 291mm diameter cutter with (32) "fixed" pockets and (4) wiper cartridges **(see FIG. 1)**.

The cutter was built and tested. It met the customer's part specifications on the ***very first try***. In addition, it almost doubled the current tool life. The customer was so impressed he ordered (7) additional cutters and is considering making the **"GOAL"** mill their ***"Standard"*** for cast iron finish milling.

A second opportunity was discovered by Dustin McClelland in Alabama. He has a customer that has been finish machining a cast iron cylinder head with a competitor's cutter for a number of years. The tool life has always been approximately 250 cylinder heads. Just recently this customer developed a quality problem with surface finish using this competitor's cutter. This problem was mainly due to the difficulty with the competitor's cutter in setting the wiper cartridges properly. It is a very difficult and time consuming operation and there are times that the cutter gets sent to the floor with improper settings.

Because of the ease in which the **"GOAL"** mill's wiper cartridges are set and the excellent tracking of the periphery semi-finishing inserts, Dustin convinced the customer to test.

The results of the test included providing the customer with a cutter that maintained the part specification **"everytime"** and increased the tool life to over 700 parts - **a 280% increase in tool life!** The customer purchased 5 additional cutters!

Just a few of the features of this cutter include a wiper cartridge that, by design, is very easy to set **(see FIG. 2)**. A second and very unique feature is that the semi-finish insert is also used as the wiper insert **(see FIG. 3)**. This makes this cutter ***"the most cost effective cutter on the market today".***