

ROTTLER

THE CUTTING EDGE

IN THE NEWSLETTER

Welcome to the 2nd issue of the "Rottler Quarterly!" A lot has happened in the past 3 months! Rottler was at the V-Twin and Dealer Expo shows, showcasing the SG7 machine. We released a new informative F68A & P55 combo DVD and launched the new F90M model machine along with our new patent-pending UNIPILOT tooling! We're working on new features for our F68A machine, and have been exercising our DM CAD/CAM software by reverse engineering combustion chambers. Read on for more details regarding these exciting developments!

DEALER EXPO & V-TWIN EXPO

Rottler recently attended both the V-Twin Expo and the Dealer News Power Sports show. The V-Twin show was held in Cincinnati, Ohio where we demonstrated our SG7 seat & guide machine cutting Harley heads. The Dealer News show was held in Indianapolis, IN where we also demonstrated the SG7 seat & guide machine. We appreciated all the great comments we received from our customers and potential customers about the SG7. The small footprint and large capacity of this machine make it a winner whether you are doing small power sports cylinder heads, Harley Davidson heads or even passenger car cylinder heads.

HOW THE UNIPILOT WORKS!

Unipilot
ROTTLER TOOLING
*The speed of live and
the accuracy of fixed*

As mentioned in the previous Rottler Quarterly, we have developed a universal pilot for all Rottler SG machines! When used with the SG7/SG8 models, the UNIPILOT works exactly the same as a FIXED

Extended into 2009!!!

Under section 179, businesses that purchase machinery put into service by December 2009 can write off up to \$250,000 on their taxes for 2009. Section 179 was originally scheduled to end in 2008, but has been extended for this year only! Tax deductions decrease dramatically in 2010, making 2009 the best year to take advantage of Section 179!

Gypsum Express is a new performance shop that took full advantage of the 179 tax credit in 2008. The owner chose to go ahead with a full performance shop of new Rottler and CWT equipment. They purchased a new CNC block machining center, a new seat & guide machine and a new diamond cylinder hone from Rottler Manufacturing along with a new engine balancer and line hone cabinet from CWT Industries.



The tax savings made the purchase manageable at the end of last year. Look for more information on this beautiful new performance shop near Syracuse NY in future Rottler Quarterly newsletters.

For more information on the Section 179 tax deductions, please visit www.section179.org.

New Models and Features for the Rottler F90Y & F68A Machines!

F68A With Automatic Tool Changer & Coolant Enclosure

Rottler is developing a new industrial standard CNC machining center which has a full enclosure containing a coolant system with an automatic tool changer and tool storage system. The machines are scheduled for delivery in early spring.

F90Y Radio Probe

Rottler has a new WIRELESS RADIO PROBE system available for the F90Y series machines that allows automatic centering in lower cylinder bores. When resleeving uppers, operators often like to center in lowers and this new optional equipment allows this to be done automatically.

pilot- yet, when used with the SG9 models, it works similar to a live pilot. The UNIPILOT is held by a patent pending spring loaded system in the spindle tool holder, it remains in the spindle when moving from guide to guide but fixes in the guide when cutting the valve seat, giving superior accuracy and speed! Please request or reference an SG9 brochure for a more detailed explanation.

P55 & F68A DVDS

Rottler has a large range of machine videos online and CD/DVD for informational use. Our most recent addition is a P55 / F68A Promotional DVD. If you are interested in having hard copies of the video demonstrations please give us a call. We are more than happy to send them your way!

F90M MANUAL MULTI PURPOSE MACHINING CENTER

One of the key features of Rottler's F90M Manual Multi Purpose Machining Center is its simplicity without programming & automation, which makes it ideal for customers who do not need or want programming. The F90M is substantially less expensive than the F90Y models, and it is fully and easily upgradeable to the F90Y version if the need should arise. These new machines are available for purchase now.

HOURS OF OPERATION

Office Hours:

M - F ~ 7:30am - 4:00pm PST

Service Hours:

M - F ~ 6:00am - 2:30pm PST
(Contact the service department before office hours by dialing extension 328)



LET US CALL YOU!

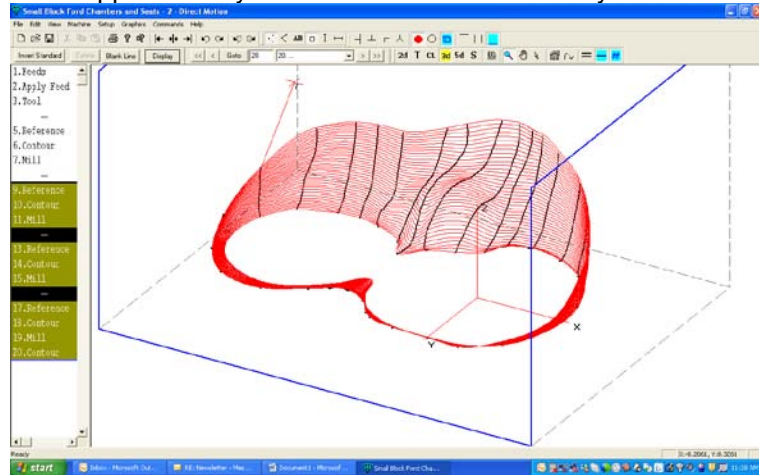
Have a question but no time to talk? Email all of Rottler's customer departments directly and get a response within 24 hours!

USEFUL LINKS

[Rottler Website](#)

Using DM CAD/CAM Software to Reverse Engineer Combustion Chambers

With very little effort you can use DM to reverse engineer very simple geometry as well as complex irregularly shaped surfaces. If you have a hole pattern or a 2-3 dimensional contour where prints are not available you can collect a series of X,Y, and Z points by simply clicking a hot button at each point in space. You can take these points and perform drilling, tapping, pocketing, and contouring operations. The example below shows how you can use this system to reverse engineer and cut a combustion chamber. The black lines represent the different cross-sections that were probed as you work your way around the chamber. There are only a handful of cross-sections to be digitized. The points in between are simply blended together using a blend function in DM. Digitizing time for this combustion chamber takes approximately one hour. You are then ready to cut.



To the left is a Combustion chamber that was probed.

Once points have been defined they can be easily manipulated to change geometry. You can add values to X, Y, and Z points or you can use your mouse to click and drag points to a new location which changes the shape of the blend.



This application can work very well with welding situations. If you have a good part or an area of a component that you can use to digitize you can create your geometry from the good part, save the program and transfer the program to the welded region of a non conforming part that you want to repair.

This process done on DM eliminates the need to buy expensive digitizing equipment and solid modeling software. You are essentially creating a cutter path each time a point is defined. The minute you finish the digitizing process you are ready to cut material.

See examples on YouTube at the following links:

- [Example 1](#)
- [Example 2](#)

Please feel free to contact us for more information on this technique.

[Rottler YouTube](#)

[Section 179](#)

[Technical Support](#)

[Sales Department](#)

[Parts Department](#)

New Machining Opportunity 7224G 6" Shell Mill

Rottler surfacing machines have a spindle that allows a variety of cutter heads to be installed to accommodate different machining applications. Recently a Rottler surfacing machine customer had an opportunity to machine a late model Cummins ISX cylinder head. The exhaust side of the head has a lip or shoulder that interferes with the standard surfacing cutterhead. Rottler now offers a 6 inch diameter shell mill that can be attached to the Rottler surfacing machine spindle. Previously this job could not be done. With the Rottler surfacer and the 6" Shell Mill it is a money making job.

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Please send your Questions, Comments and Concerns to: sara@rottermfg.com