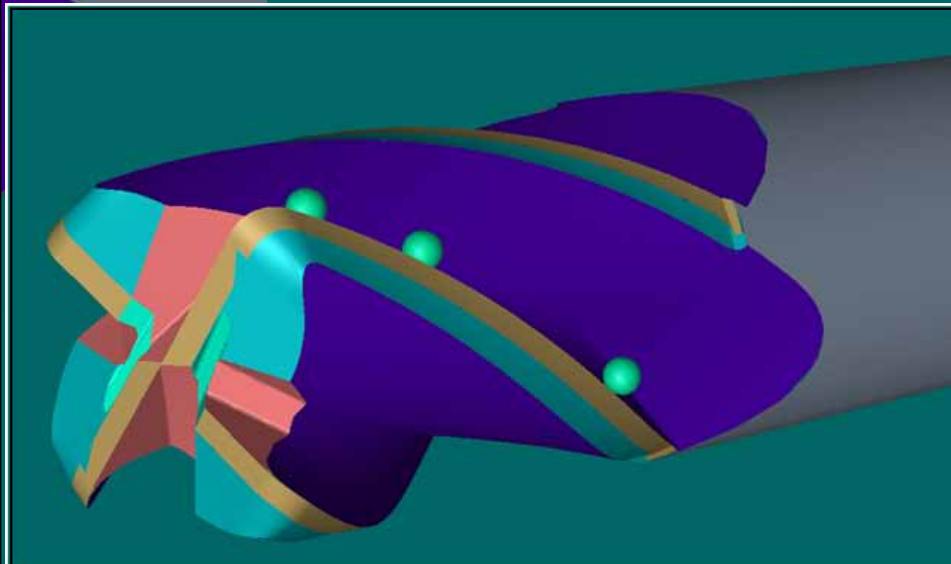


Go from manufacturing to regrinding (with probing) in seconds



Productivity Enhancement

December 2011
Helitronic machines
#82

Secrets revealed! Software features you probably missed, but that save you lots of time in setting up a cutting tool!

Our **Helitronic Tool Studio** software offers incredible flexibility for designing and grinding competitive cutting tools, plus a high degree of efficiency. But a few of **Tool Studio**'s excellent techniques for saving time are often overlooked...

Convert from manufacturing to regrinding in seconds

Each **Tool Studio** wizard guides you through set-up with simple questions, showing only the relevant data and minimizing your data input. When you create a manufacturing program with the endmill wizard, it includes an operation to probe the *radial angle* in case you need to rework the tool.

To quickly convert to a regrinding program:

Grind	OK	M	C	F	Cr	Operation
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				End Of Tool Probing
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				Probing Radial Angle
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		F		Fluting
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				CR Profile Pre Forming
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		F		CR Heel Clearance
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				CR Gash
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		D		CR Square Gash
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		D		CR Notch
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		F		2. Ef-Corner-Od Clearance
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		F		1. Ef-Corner-Od Clearance

- Use the “reapply” button
- Choose “regrinding” & “keep parameters”

This automatically adds an operation to measure the *helix*.



Grind	OK	M	C	F	Cr	Operation
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				End Of Tool Probing
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				Probing Flute Helix
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		F		Fluting Regrinding
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				CR Profile Pre Forming
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		F		CR Heel Clearance
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				CR Square
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		D		CR Square Gash
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		D		CR Notch
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		F		2. Ef-Corner-Od Clearance
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		F		1. Ef-Corner-Od Clearance

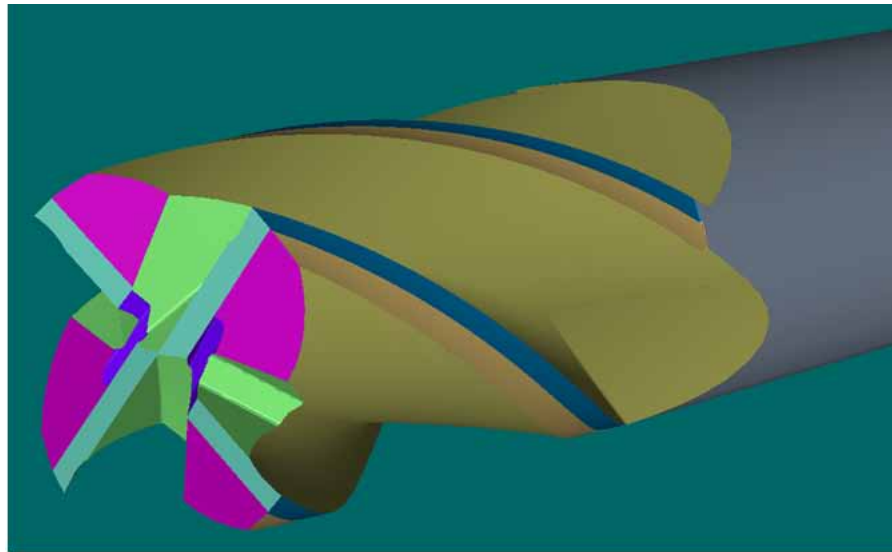
Over for more



Convert from a square to a corner radius endmill in seconds

Let's say you've used the wizard to create a square endmill, making all your adjustments, getting it just the way you want it. But then realize you really need a corner radius endmill... You DON'T have to repeat all that work!

Converting a square endmill to a corner radius endmill is a simple matter of re-applying the wizard, though several operations differ between the two styles. For example, if you intend to use the "one pass" feature, the end-face and OD are ground using the same operation on a corner radius tool, whereas they are separate when grinding a square endmill.

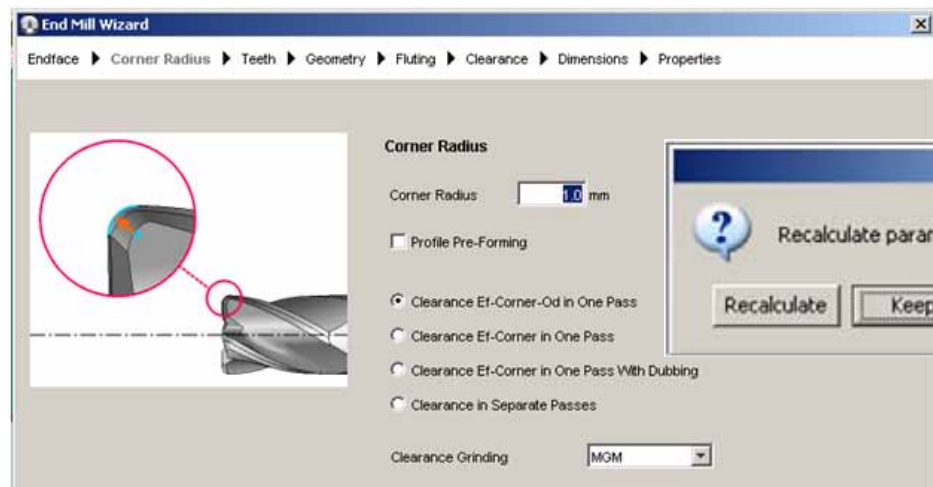


- Use the "reapply" button



- Select the "Corner Radius" tool type

- Enter the radius size and choose to "keep parameters"



This automatically adds the appropriate corner radius operations.

Grind	OK	M	C		F	Clr	Operation
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					End Of Tool Probing
<input type="checkbox"/>		<input type="checkbox"/>					Probing Radial Angle
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			F		Fluting
<input type="checkbox"/>		<input type="checkbox"/>					CR Profile Pre Forming
<input type="checkbox"/>		<input type="checkbox"/>			F		CR Heel Clearance
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					CR Gash
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			D		CR Square Gash
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			D		CR Notch
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			F		2. Ef-Corner-Od Clearance
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			F		1. Ef-Corner-Od Clearance

One final adjustment is needed to create a "one-pass" corner radius: Ensuring that you are using the correct wheel for the one-pass operation. This is easily done by using the wheel menu to select a corner radius wheel pack.

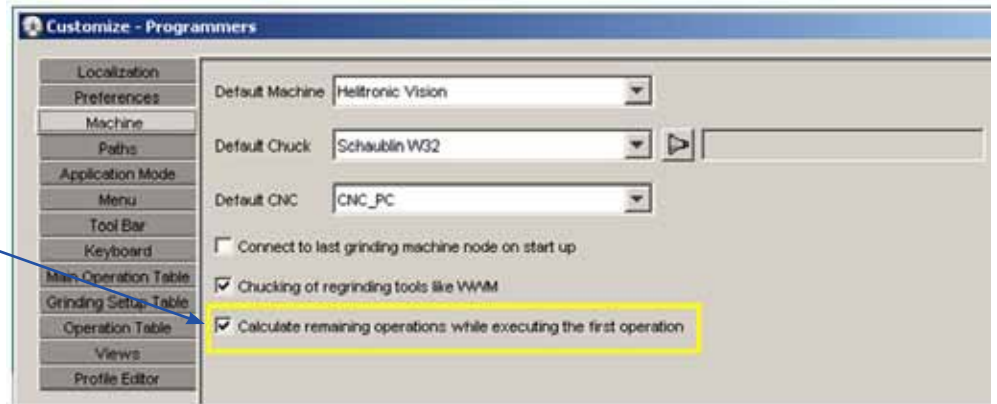
Speed your automated production runs!

(or...”Hidden boxes that save the world”)

Tool Studio V1.8 and V1.9 both include an option to calculate *only the first operation* before grinding. Subsequent operations are then calculated in the background *while the tool is grinding*. This greatly speeds up the start of the grind, saving overall cycle time.

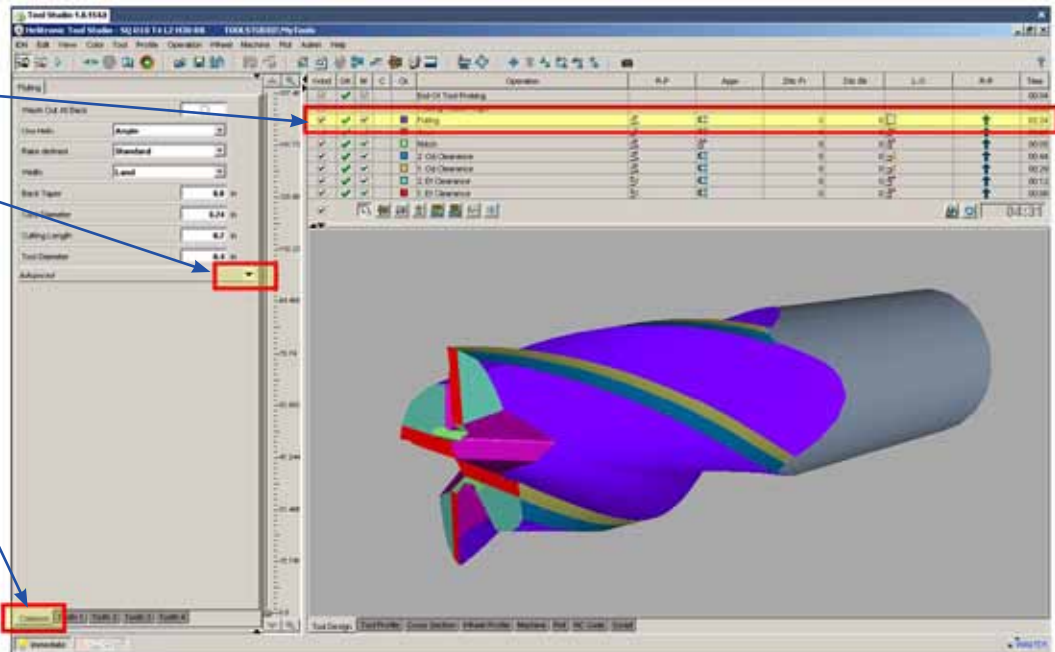
In Tool Studio V1.9:

- Go to the Admin pull-down menu and select “Customize”
- Then check the box “Calculate remaining operations while executing the first operation” under the “Machine” tab



In Tool Studio V1.8:

- Select the “Fluting” operation and the “Common” tab and expand the “Advanced” parameters window
- From the “Advanced” parameters menu check the box for “Grind in Separate Frame”



Preventing a few bad apples from stopping an automation run

A rejected tool typically causes a loader run to abort, leaving all remaining tools unfinished. **Tool Studio V1.9** lets you adjust the number of errors, allowing the run to continue.

Still want the WWM loader menus?

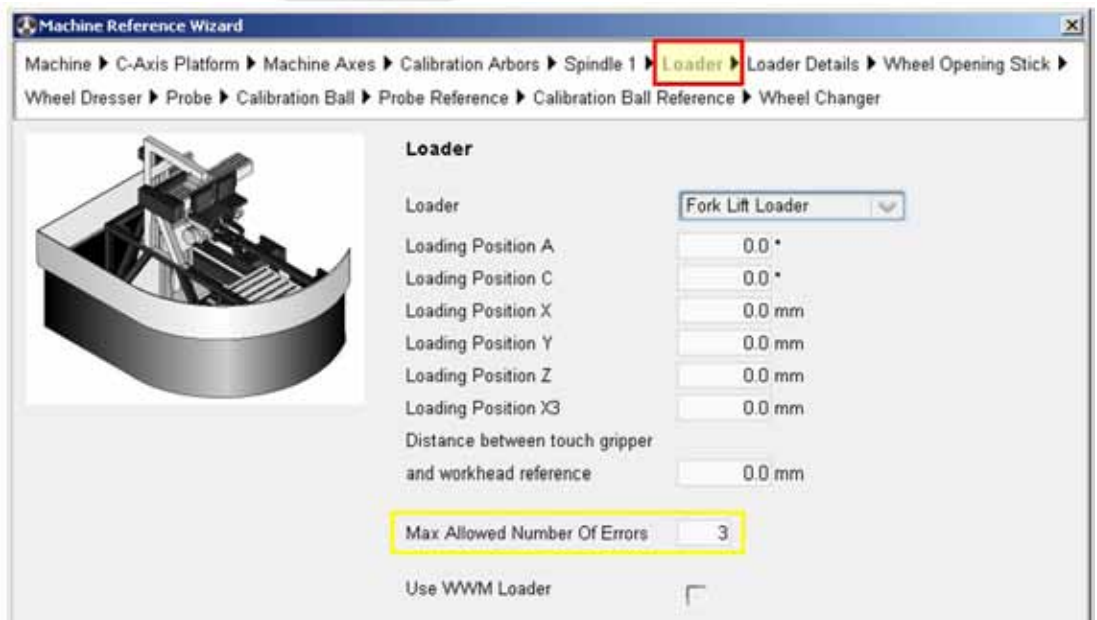
Another obscure feature on this page in **Tool Studio** allows you to use the Walter Window Mode (WWM) loader instead of the **Tool Studio** Batch Manager. Just check the box and select the **Tool Studio** database you want to use.



- From the Tool Studio Server window, select the machine “Setup Wizard” using this button
- Select the Machine Reference Wizard



- Select the “Loader” quick link to jump to the “Loader” page
- Set the desired “Max. Allowed Number of Errors”



Getting Tool Studio V1.9

Tool Studio V1.9 is standard on new Walter Helitronic machines delivered from July 2011 on and runs on previous models beginning with the HMC 500 control (1997) if upgraded appropriately. Our Customer Care team can clarify.



**United Grinding Technologies
Tool Division**

Fredericksburg, VA
PH: 540-898-3700 • FAX: 540-898-6819
www.grinding.com

Give us a call!
(540) 898-3700, Ext 2

CLICK HERE
for more info

*Most versatile tool grinders
Best software
Best support...worldwide*

