

Don't forget to schedule training when you upgrade your machine. After all, even Einstein needed a good education.



Productivity Enhancement

Easy upgrades that make your machine run faster and smarter!

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Helitronic machines
#80

If you need more capacity or flexibility but can't wait for a new machine, it's time to consider upgrading your existing equipment. You might be surprised at how cost effective this can be...

Windows XP is the baseline for shorter cycle times

Upgrading to the Windows XP operating system allows you to update to the latest Walter Window Mode (WWM) grinding software (Build 21). Running XP and WWM Build 21 gives you:

- Faster calculations for shorter cycle times
- Faster navigation thru menus
- Improved networking
- USB interfaces
- Faster & more accurate probing

The older the control, the more hardware we need to update. But even a 1997 vintage HMC 500 control running DOS can be upgraded to XP for \$12,000 in parts and labor. NT to XP costs less than \$10,000. (Travel costs are extra.)



HMC 500, HMC 600 and Fanuc 310i controls can be updated to run the latest software, even Tool Studio

Tool Studio on a 14 year old machine!?

Once you've updated your control run XP and WWM Build 21, you can also upgrade to our state-of-the-art Tool Studio software - even on an HMC 500 control. This gives you ability to grind the kind of high tech geometries that will make you super-competitive...

Over for more 

 **WALTER**
KÖRBER
SCHLEIFRING

Tool Studio gives you power to customize and pull ahead of competitors

Tool Studio makes it easy to create highly customized geometries for specialized applications, like the ability to vary helix angle within individual flutes, as pictured to the right. Unique designs solve machining challenges and put you ahead of the competition!

Plus Tool Studio offers all these outstanding standard features:

See your changes instantly: Every change appears instantly in a high-resolution 3D graphic and automatically rewrites the grinding program in the background. The simulation *is the grinding program*. This speeds tool development and gives you confidence along the way.

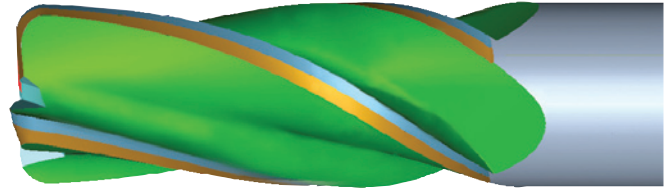
“Click to edit” anything from one screen — Save time and eliminate aggravation: Simply clicking the 3D graphic lets you see anything relevant to *that part of the tool*: grinding parameters, operations, wheel data, a 2D cross-section, a profile view, and a complete machine view. No hunting through separate windows and menus. Plus you can measure tool features from this central screen, correct any errors, try new design ideas, and check the results instantly.

Grind all the latest high tech geometries: Add any number of grinding operations per tool, mix and match operations, and change any individual feature to create geometries of any complexity: Variable helix...Variable rake...Variable core...Variable land width...

AMMO minimizes cycle times: *Tool Studio*'s Automatic Machine Move Optimizer (AMMO) makes lift-offs as small as possible and calculates the shortest possible path between operations. So ALL non-grinding moves are minimized for reduced cycle times. Some users upgrade to *Tool Studio* for this reason alone.

How much?

Upgrading from WWM to Tool Studio can be done for under \$7,000, including labor (assuming your control is running XP). And that includes both “Wizard” guided programming for endmills, drills, reamers, and spherical tools *plus* Flexible Programming for odd features and the ability to add and remove operations (i.e. Tool Studio Basic *and* Advanced). Wizards for step tools and burrs are extra.



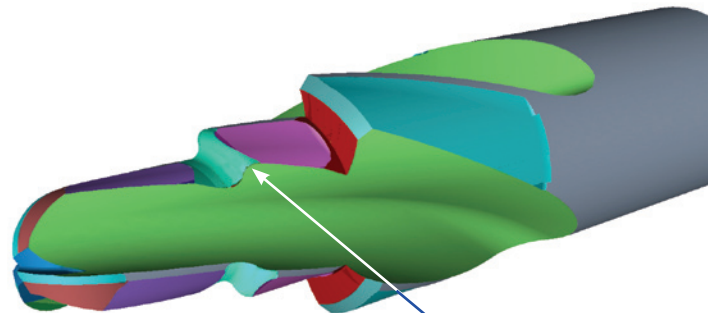
Tool Studio makes it easy to do things like vary the helix within a flute, while simulating every change you make instantly in accurate 3D. Plus Tool Studio gives you complete control over such features (e.g. you can vary helix linearly, according to a table, according to a Bezier function, etc.)



Take full advantage of Tool Studio's power: Schedule training at our place or yours. Call (540) 898-3700, ext 241



Tool Studio includes a new “hollow grind” method (i.e. grinding with the OD of the wheel) that yields better wheel clearance, making it possible to grind a corner radius on endmills with more than 6 flutes



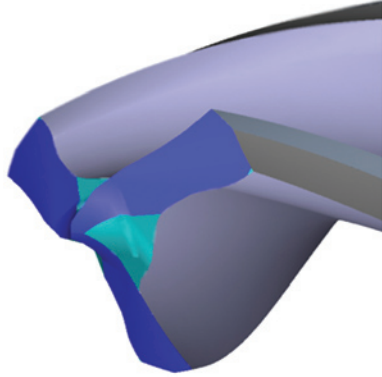
With Tool Studio you can combine an endmill endface (here a ballnose form) with step tool geometries...

And you can grind a cam relief on a form step with a standard wheel

What if you're already using Tool Studio?

Until recently, Tool Studio V1.8 (introduced in 2009) offered the best performance and versatility. Anyone using an earlier version should definitely consider an upgrade as soon as possible. Besides all the standard Tool Studio features, V1.8 offers

- New high performance drill points
- Many wizard improvements, including an optional burr wizard
- An optional Feedrate Optimizer to cut cycle times up to 40%
- An optional Internal Measuring System (IMS) to maintain endmill dimensions during a long production run



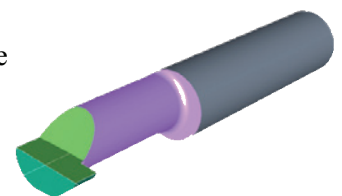
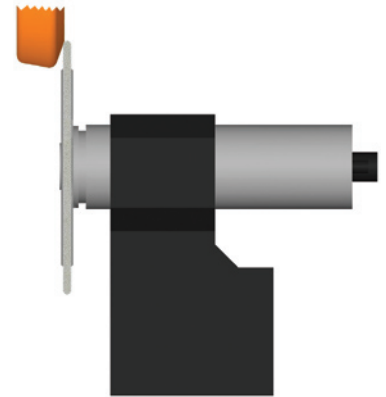
Adding an ECO Loader PLUS is like adding another shift for ~\$30 per day!

Any Helitronic Power or Power Diamond machine with XP and WWM Build 21 can be retrofitted with an ECO Loader PLUS. That gives the machine the ability to handle up to 165 tools unattended, turning breaks and the hours after you close into *productive time*. It's a fantastic way to boost your profitability as it essentially adds another shift for roughly \$38,000 in parts & labor (a bit more if you want additional tooling). Wow!

What's the difference between Tool Studio V1.8 and V1.9?

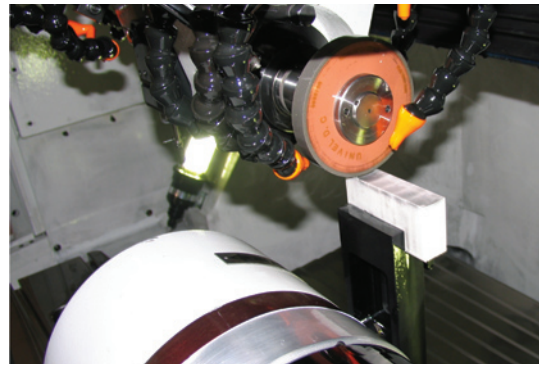
Machines now ship with V1.9, so if you're getting Tool Studio for the first time you'll get V1.9. If you're running V1.8, updating to V1.9 costs under \$1,500 and gives you these new features:

- "One size fits all": V1.9 runs on all Helitronic models, including the new Micro
- All loaders for HMC (Andron) and Fanuc controls are included in the Batch Manager
- Complete independence from WWM
- Wheel Profile Calculator (optional) to automatically calculate wheel shape to achieve a desired flute form or create a flute form based on an existing wheel profile
- Internal wheel dressing (optional)
- Endmill improvements, like reapplying the Wizard to convert a Production IDN into a regrind IDN, or change the tool from a square end to a corner chamfer, or change clearance from facet to eccentric, etc.
- Drill improvements, like the ability to split the K-Land into sections, or apply a radius gash to the Form E point
- Step tool & form tool improvements, including the ability to add K-Lands to profiles
- Wheel Data Connect (optional) to:
 - Import measured wheel data directly from a Helicheck
 - Run Tool Studio's Wheel Editor on the Helicheck machine, making it easy for your grinding machine operators to measure wheels
- An operation that makes it easy to create an eccentric neck or a timing flat on a blank



Consider automatic wheel sticking for true automation

Automatic wheel sticking keeps the wheel cutting freely without intervention. This cuts cycle time, boosts output, and fully automates your production. (Production isn't really automated if your operator has to periodically stick the wheel!) This feature can be added to any Helitronic machine running Tool Studio V1.8 for the cost of the fixture (\$760). It's also available for WWM Build 21, but requires the fixture plus Package 18 (\$3,600 total). Either way, you can install it yourself.



Automated Wheel Sticking keeps the wheel cutting freely throughout long, unmanned production at low cost

A Power Fluter is another approach to keeping wheels open

Another approach to keeping wheels cutting freely is to apply a 600 PSI coolant blast into the fluting and gashing wheels (not the grinding zone). This requires the XP/WWM Build 21 update plus an additional pump and piping. This approach doesn't interrupt the cycle, like wheel sticking, but is noisier and a larger investment (\$17,000 as a field retrofit, plus travel).

Better tool support = faster grinds

Adding a hydraulic steadyrest enables more aggressive fluting for shorter cycle times and higher production. The cost depends on your machine generation and the degree to which it's prepped for hydraulics.



Put Preventative Maintenance in your budget as a planned expense and watch the cost of your unexpected service calls drop – while your productivity rises. Your machines will run continuously when needed and you can schedule your downtime for slow periods.

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(540) 898-3700

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