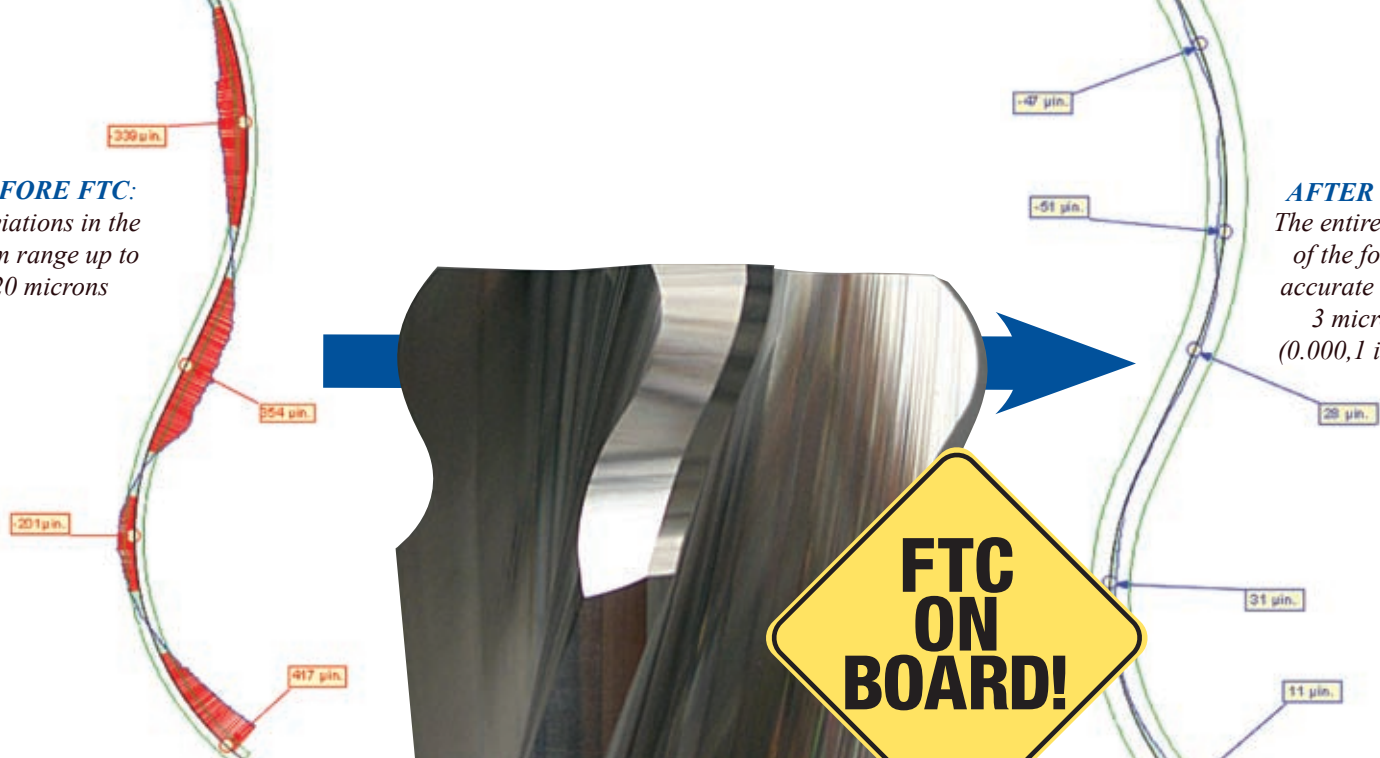


**BEFORE FTC:**  
Deviations in the  
form range up to  
20 microns



**AFTER FTC:**  
The entire length  
of the form is  
accurate within  
3 microns  
(0.000,1 inches)

# INFO

Feb 2010  
FTC On Board

## Save an hour or more setting up form tools Without a Helicheck measuring machine!

**A** new removable camera and light unit lets you use Walter's Form Tool Compensation (FTC) *without a Helicheck*. The new system – which we call “FTC On Board” – *automatically* corrects any deviation between a ground profile and the desired form to within 0.000,1 inches (3 microns) on Helitronic machines with glass scales. (FTC with a Helicheck is accurate within 79 micro-inches, or 2 microns.)

That saves an enormous amount of setup time on any profile tool. And it puts even the tightest tolerance, high value tools like “Christmas Tree” root form cutters easily within your grasp. FTC works for three grinding methods: faceted relief, cam relief, and cylindrical grinding – straight or helical flute.

### How does it work?

- Use Walter Window Mode (WWM) Package 7 to automatically convert your CAD file (.dxf) to a .dcw file representing the nominal profile
- Grind the first tool to the upper tolerance

- Mount the *FTC On Board* unit to the grinding head of the Helitronic machine. This takes less than a minute and there's no need for calibration as the adapter is self-centering
- The *FTC On Board* unit automatically scans the profile using a measuring program generated from the grinding program
- The FTC software then compares the scanned profile to the nominal profile and automatically calculates any needed corrections
- Remove the *FTC On Board* unit
- The Helitronic then grinds the tool again to meet tolerance within 3 microns

Over for more 

**WALTER**  
KÖRBER  
SCHLEIFRING



## As easy as 1-2-3:

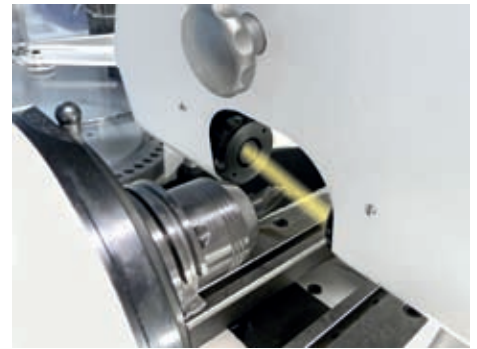
Grind a tool & measure internally with FTC On Board



Automatically create complete compensation file for the grinder



Grind a near-perfect tool & send it to your customer



FTC On board includes a high speed gigabit camera, high power collimated LED backlighting, sealed housings for the camera and lights, & air nozzles for automatic tool cleaning

*Make form tools easy...*



### Other highlights

- **Mobile:** The *FTC On Board* unit can be moved from grinder to grinder as your production dictates
- **Fast:** Scans about 1 mm in 5 seconds, so scans a complete 60 mm (2.4 inch) profile in 5 minutes
- **Reliable & Accurate:** Doesn't rely on an operator to pick points. Automatically scans hundreds of points across the complete profile and compensates across the entire profile
- **Handles difficult surfaces:** Uses a backlight (not a front light) to reliably find the cutting edge; handles different tool materials and lesser surface quality with ease
- **Versatile:** Automatically calculates the focus on even helix tools; precision telecentric backlight optics scan long profiles

### Getting *FTC On Board*

*FTC On Board* is available on new Helitronic Vision, Power Production, Diamond, and Power Diamond models. It can be added later if the machine is prepped for *FTC On Board* when manufactured.



KÖRBER  
SCHLEIFRING

**United Grinding Technologies  
Tool Division**

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

[Click for more info](#)

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

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



www.grinding.com