

# UNISON CORPORATION

Leading The Industry In Grinding Technology



Flexible Grinding Systems



Unison manufactures nine versions of its Flexible Grinding System (FGS). Each of these machines use Unison's proprietary software and motion control. The FGS Series is constructed on a cast iron base which has been hand scraped to insure the highest level of accuracy. Precision ground ballscrews are installed to provide smooth motion control and increase both the accuracy and longevity of the FGS Series machines.

## Model 2150 CNC DedTru Grinding System

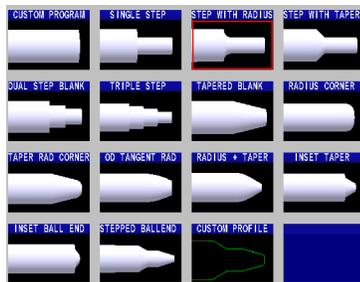
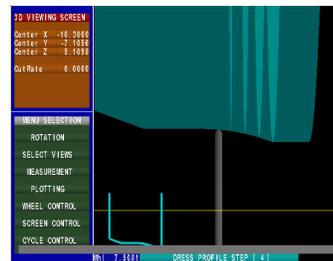


### Blank Preparation Made Simple

The **Model 2150's** are three axis CNC versions of our DedTru Centerless Grinders. The Model 2150's are highly precise grinders for centerless OD grinding and are used for thrufeed, infeed and secondary operations such as plunge grinding, tapers and profile grinding for cylindrical parts with diameters from .005" 0 (.127mm) to 5" (127mm). These CNC Grinders are ideal for prepping blanks used in the manufacture of precision cutting tools.

The Model 2150 can be equipped with a Model C, C6 or PGF DedTru Grinding Fixture,

Unison is pleased to introduce our latest Version software package which is designed specifically for automated Blank Preparation using our Model 2150 CNC DedTru Grinding System. This Windows™ based software requires the operator to simply enter the basic tool characteristics of the shape to be ground and the machine's control will automatically calculate the required wheel geometry, dressing locations and grinding parameters. The software calculates the required offsets and determines the best method for grinding the blank.

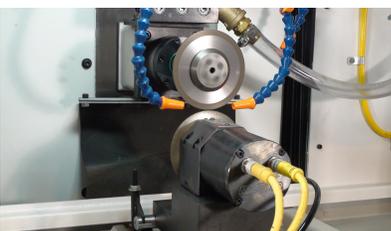


Since the Model 2150 is equipped with "In-Process" wheel dressing capability for conventional aluminum oxide and superabrasive grinding wheels, the machine practically runs itself. When equipped with Unison's optional on-board Electric Dresser, the machine can also dress complex profiles in both diamond and CBN grinding wheels. Navigation of the software is easy using the 15" high-resolution touch screen display in the new, larger operator's console.

## Model 2000 WDN CNC Wheel Dresser

The **Model 2000 WDN CNC Wheel Dresser** is manufactured for precise computer-controlled automatic dressing of grinding wheels. This machine is ideal for dressing both conventional and superabrasive wheels.

In addition, the Model 2000 WDN can be used as a network hub for your Unison Windows™ based CNC Grinders for storing and wirelessly retrieving your grinding wheel profile programs.



The Model 2000 WDN is shipped with a complete software package so you can use the machine as an off-line programming station to develop part programs for your Unison Grinders when you are not using it for automatic wheel dressing. The spindle of each machine is custom-made to fit the taper size of each customer's wheel adaptors so the Model 2000 WDN can be used to automatically dress wheels for not only Unison's machines but for other grinding machines as well.

# Model 2350 CNC TruCut Grinder



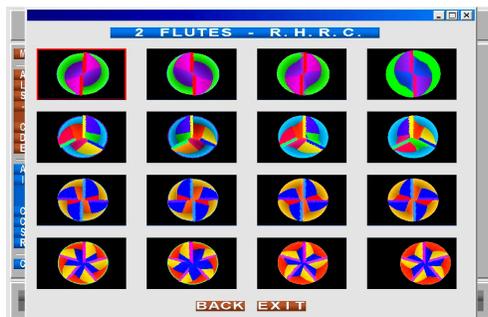
The **Model 2350 CNC Four Axis TruCut Grinder** is designed for the manufacturing and re-manufacturing of carbide and HSS end mills. It will also grind the side relief and end geometry of endmills as well as specialty endcuts. Such as center cutting, center relief, fishtail relief and other custom endcuts.

Unison Model 2350 Four-Axis TruCut Grinder is a rigid, but compact, proven version of our Flexible Grinding System™. This machine features a fully enclosed work area and is specifically designed for the manufacture of both standard and special cutting tools requiring end grinding and relieving operations. The Unison Model 2350 incorporates years of technological developments currently being utilized on our four and five axes cutter grinders. It combines fast cycle time, high precision, reliability and flexible programming systems.

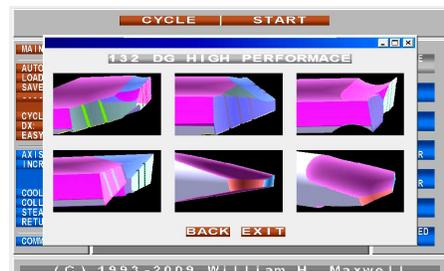


# Model 2650 Combination Cutting Tool/ Burr Grinder

Unison's **Model 2650 Combination Cutting Tool/ Burr Grinder** is a turnkey 7 Axis CNC production grinder featuring an automatic parts loader/unloader. This machine is supplied with a self contained coolant system and a complete package of our proprietary software.



The Model 2650 is designed for high production manufacturing of small tools made from carbide, HSS, ceramic, stainless steel and other materials. This grinder is installed in many of the world's largest manufacturers of medical, dental and industrial burrs.



# Unison Software - The Ultimate in 3D Grinding

We are pleased to announce all Unison CNC Grinders are now being shipped with Windows™ Operating Systems as well as Unison's new proprietary software.

**With the introduction of our latest software, Unison Corporation has once again set a new standard** in the ease-of-use of our CNC Grinders by simplifying the most complex tool geometry. The Windows™ Operating System works seamlessly with Unison's Tool Grinding Software which allows the machine's operator to quickly customize new tools, modify existing tool programs, troubleshoot machine errors, etc.

**Want to save production cycle time?** Our software allows you to simply start another window on the machine's computer control monitor to begin programming a new tool while the machine is running production. Unison's software incorporates a high definition 3D Parts Predictor which permits your operator to actually view the tool before any grinding begins and offers advanced program verification to detect errors which can cause crashes before they occur. The operator knows exactly what the machine will be doing before it does it. Most importantly, once the operator begins to grind a part, Unison's 3D Parts Predictor also illustrates the tool as its being ground.

## Features of Unison's new Version 7 Package

- Combining Unison's software with the Windows™ Operating System automatically optimizes the grinding performance, increases your production of parts, improves part quality and increases overall shop floor efficiency
- Unison's software will quickly qualify tools and check part specifications
- 3D Parts Predictor – offers advanced verification of programs to alert the operator of potential collisions between the tool and the grinding wheel before they occur to avoid potential costly machine crashes and to provide dual feedback diagnostics.
- Three-dimensional live simulation allows the operator to view a tool before grinding begins and also lets you view the actual tool being ground during production.
- The operator of a Unison CNC Grinder can begin designing and/or loading the next tool program while the machine is grinding parts to maximize the machine's productivity.
- Remote Programming Station - If you have more than one Unison Grinding Machine, you can use an off-line remote programming station to function as the main server for your network of machines.
- Operator Lockout – Unison's software has been designed to be very flexible to allow for customized security measures to prevent access without a specific password. The importance of this feature is the software will allow the operator to only perform the functions they have access to.

A complete package of software including the above features is included with every Unison CNC grinding machine. This offer eliminates customers from incurring additional software charges in the future.

Unison's extensive experience, spanning over 50 years in the field of grinding, allows us to design and build some of the best machines to **Solve Grinding Problems**. Call or email us today for advice on your specific grinding applications.



***“Unison = Grinding Solutions”***

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