

# UNISON CORPORATION

## MODEL 3000 DUAL SPINDLE CNC PROFILE PEEL GRINDER



The Unison Model 3000 is a Dual Spindle five axis CNC Profile Peel Grinder with a built-in three axis pick-n-place Loader/Unloader for continuously grinding parts for long periods of unattended operation. The machine can be equipped with a ninth axis for controlling an optional on-board electric wheel dressing system to automatically dress the finishing wheel. The Model 3000 was designed for grinding cylindrical or tapered parts with multiple steps and is perfectly suited to grind complex forms into medical and dental parts as well as to prepare tool blanks for endmills, reamers, drills, burrs, etc. with precise geometrical dimensions.

Unison's Profile Peel Grinder was designed to achieve high material removal rates for cylindrical and tapered parts which require outside diameter grinding. The Model 3000 uses thin grinding wheels so the forces imparted into the workpiece are very low with much less heat being generated when compared to other methods of grinding thus improving overall part geometry and surface finish. Unison's proprietary software automatically switches between grinding surfaces to seamlessly produce tools with varying degrees of radii and allows the operator to manipulate the dimensions of the part to create straight lines and arcs.

The Model 3000 can rough and finish grind in one pass using its powerful direct drive 26.8 horsepower (20kW) Roughing Spindle with a maximum speed of 9,000 RPM and its direct drive 6.7 horsepower (5kW) Finishing Spindle with a maximum speed of 10,000 RPM. This grinder features Yaskawa AC Drive Amplifiers & Servomotors and preloaded Precision Ballscrews. The Model 3000 is built on a polymer cast base and is equipped with a Schaublin W25 Pneumatic Workholding System as well as a precise probe assembly to guarantee repeatability of parts.

The Model 3000 features Unison's new EZ Software allowing the machine's operator to quickly customize and/or modify tool geometry with a user friendly interface by merely "filling in blanks" and then verifying the part program by using the machine's real-time 3D Parts Predictor. Each machine is supplied with a complete software package and library of tool programs at no additional charge. The Model 3000's Computer Control monitors critical machine functions and alerts the operator to problems encountered during grinding as well as errors are tracked and logged within the Control to help identify problems. The Model 3000 can be networked and/or monitored via the internet and can be equipped with a Remote Connect feature allowing direct communication with Unison.



For additional information regarding the products of Unison, please contact our Marketing Department at (248) 544-9500; fax us at (248) 544-7646 or e-mail us at [sales@unisoncorp.com](mailto:sales@unisoncorp.com).