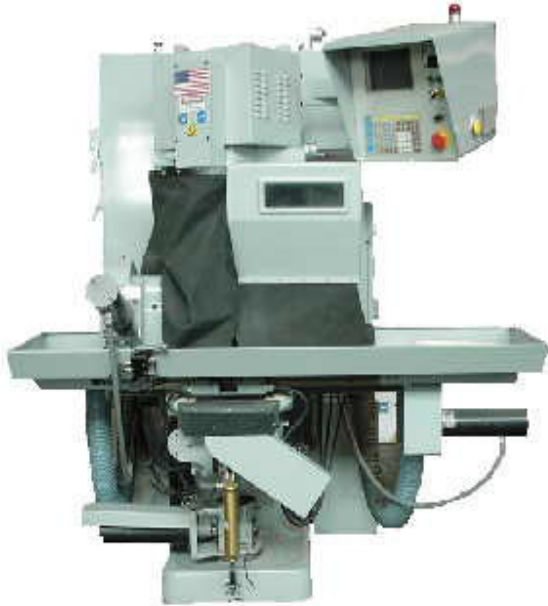


Unison Corporation

MANUFACTURER OF CNC FLUTE GRINDERS SINCE 1976



Unison's TruFlute Series



Designers and Builders of DedTru, TruFlute and
Other Precision Grinding Equipment.

Model 688 TruFlute

The New Unison **Model 688 Four-Axis CNC TruFlute Helical Grinding System** produces straight or helical flutes in one pass. This machine automatically grinds straight and tapered fluted tools such as drills, reamers and end mills. The Model 688 is a rigid and proven helical grinding system specifically designed for the manufacturer of both standard and special tools.

The Model 688 is known as the **“Workhorse”** of the New Unison product line.



MAJOR BENEFITS

- » Proven Reliability
- » New Control Featuring A Pentium Processor
- » Flute & Relieve In One Chucking
- » Software Which Includes A 3 Dimensional Predictor
- » Program Custom Shapes With Ease
- » Easier To Use Multi Wheel Pack
- » Ease In Programming Custom Shapes
- » Capacity To Store Up To 10,000 Part Programs & Wheel Packs
- » Easy Parametric Programming With Instant Recall Of All Programs
- » Production Monitoring/Parts Count

STANDARD MACHINE FEATURES

- ▶ The wheel spindle is belt-driven, oil mist lubricated and is constructed with two pairs of super precision angular contact bearings.
- ▶ Wheel speed 3600/6000 RPM
- ▶ Cast iron ways with adjustable gib
- ▶ Zero backlash, preloaded ballscrews with servo drives
- ▶ Oil mist lubrication system for the wheelhead with automatic low level shutdown.
- ▶ Automatic Bijur way lubrication system
- ▶ Fused disconnect

SPECIFICATIONS

Work Capacity	Axis Travel	Axis Drives	Maximum Wheel Diameter	Spindle Drive	Approximate Floor Space
Maximum Diameter: 10" (254mm) Maximum Length 20" (508mm)	A-Unlimited X-20" (508mm) Y-7" (178mm) Z-8.5" (216mm) C-90° RH; 45° LH	Servo Motors Encoder X,Y,Z & A	Maximum 8" (203mm)	A-C Motor 3600/6000 RPM 5 H.P. Standard 10 H.P. Optional	71" x 94" (1803 x 2388mm)

Model 9100 Super TruFlute



The Model 9100 Super TruFlute for Regrinding Pulverizer Blades

The Model 9100 Super TruFlute incorporates state-of-the-art technology in the machine's design. The machine utilizes a system of round hydrostatic ways on the X, Y, and Z-axes and a substantial C axis assembly which minimizes machine deflection during the grind cycle.

The hydrostatic components increase the machine accuracy, rigidity, repeatability and overall grinding speed. The hydrostatic ways use an oil film under pressure between moving parts to minimize friction and for damping, stiffness and mathematical accuracy.

The Model 9100 features the New Unison UPC "Geometral" control incorporating an Pentium™ processor for program calculations and machine motion control. This control employs a fill-in-the-blank system to easily define the dimensional data required for setting-up cutting tools. The "Geometral" programming language is simple to use and eliminates the need for your operator to understand traditional NC programming languages. Our software allows your operator to quickly modify and customize your tool geometry making the Model 9100 Super TruFlute one of the most powerful and flexible machines on the market. You are no longer required to make tools the way the machine manufacturer dictates but rather, you design your own tools the way you want them.

The Model 9100 was designed to achieve three major goals:

1. High consistent quality of finished tools.
2. Fast machining and programming.
3. Extremely long life without maintenance or unscheduled down-time.

The Super TruFlute features a fully programmable five axis motion control capable of simultaneous A/C/X/Y and Z grinding in any direction.



If you have questions or would like a quote, contact any member of our Marketing Department at (248) 544-9500.

Bringing Cutting Tool Manufacturers



- ▶ The **Ultimate Consistent Quality** capability for finished fluted tools
- ▶ The **Fastest Machine** capability in terms of machining, programming and changover
- ▶ The **Longest Wear Life** capability without maintenance or unscheduled downtime

The Model 4000 is the ultimate machine for fast, accurate cutting tool production, consisting of five axes having the most advanced state-of-the-art controls. Some of the design features are hydrostatic ways, air conditioned electrical panel, automatic coolant filtration system and touch probe. Everything is designed for speed and long life.

The Super TruFlute features a fully programmable five axis motion control capable of simultaneous A/C/X/Y and Z grinding in any direction enabling operations such as :

- » G Drill/Reamer
- » Step Tool
- » End Mills (standard, ballnose, & corner radius)
- » Taper Tools with Consistent Helix, Consistent Lead
- » Compression Tools
- » Standard Drills and Subland Drills
- » Router Bits
- » Milling Cutter/Saws
- » Spade Drill
- » Burr Tools
- » Specialty Tools

Work Capacity	Axis Travel	Axis Drive	Maximum Wheel Diameter	Spindle Drive	Approximate Floor Space
Diameter Range: .020"-12"	A-Unlimited X-13"	Servo Motor Encoders X,Y,A & C	Maximum 10"	10 HP Variable Speed (Programmable)	84" x 96" 2134mm X 2438mm
Maximum Length: 12"	Y-8" Z-12.5" C-180°	Glass Scale Z			



New Unison Corporation
 1601 Wanda Ferndale, MI 48220
 Phone: (248) 544-9500 Fax: (248) 544-7646
 Email: www.newunison.com Website: sales@newunison.com