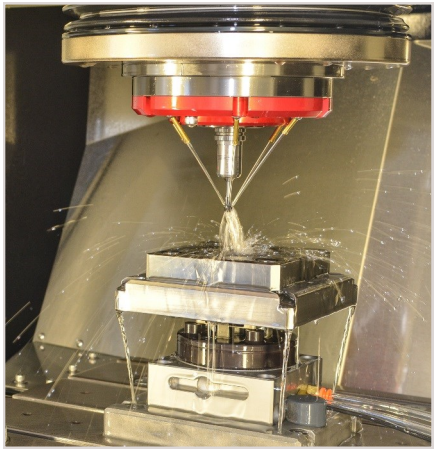
Nanotech®
Ultra-Precision Machining Systems

MOORE TOOLS

Nanotech 400 UPJG V1

Next Generation



Ultra Precision Jig Grinding Center

- **Hole Roundness ≤ 0.5µm**
- **Hole Positioning Accuracy Within ± 0.5µm** over 100mm
- Ultra-Stiff Oil Hydrostatic Slideways with Dual Iron-less Linear Motor Drives
- 1 Nanometer Linear Feedback Resolution
- Delta Tau Power PMAC Real-time 64-bit Motion Controller with 20,000 block lookahead for advanced trajectory calculations
- ***NanoSMART***® - Touch / Swipe Gesture Based Interactive HMI
- Major Options: 30 Station Automatic Tool Changer ♦ High Speed Dressing Spindle ♦ Automated Wheel Dia. & Length Measuring System (Autosize) ♦ Automated Process Optimization (Autogrind) ♦ 3D Touch Probe for In-Situ Part Measurement ♦ Temperature Controlled Flood Coolant ♦ Mist Extraction System

4-Axis Ultra Precision Jig Grinding Center

30 Station Automatic Tool Changer

Please see reverse side for specifications

Nanotech 400UPJG Specification Overview

System Configuration

Ultra-precision four axis jig grinding machining center	X, Y, Z, W
Slide type	Fully constrained oil hydrostatic box style
Slide drive (X,Y,Z)	Dual iron-less linear motors
Slide drive (W / reciprocation axis)	Precision ball screw
Feedback resolution	0.000001mm
Tool interface	HSK-E25

Capacity

Maximum workpiece dimension	400 mm x 400 mm (15.75 in. x 15.75 in.)
Maximum weight	250 kg (550 lbs.)
Table surface configuration	T-Slots -10-H2 & M8 Tapped Holes
X-axis travel (cross axis)	1000 mm (39.4 in.)
Y-axis travel (machine table)	400 mm (15.75 in.)
Z-axis travel	250 mm (9.8 in.)
W-axis travel (reciprocation axis)	90 mm (3.5 in.)
Distance from table surface to spindle gauge-line	150 – 400 mm (5.9 in. – 15.75 in.)

Speeds and Feeds

Vmax X & Y	6000 mm/min (236 in/min)
Vmax Z	4500 mm/min (177 in/min)
Vmax W	16000 mm/min (630 in/min)
Spindle speed	0 - 60,000 rpm

System Control

Control	Delta Tau 1GHz PowerPMAC
Data storage	500 GB hard drive
Interface	DVD RW Drive / 2X USB Ports / 10/100/1000 Ethernet Connection
Block look-ahead	20,000 blocks
Move segmentation time	250 µs
Programming resolution	0.000001 mm
HMI	NanoSMART gesture based touch screen interface

Workpiece Accuracy

Hole roundness	≤ 0.5 µm
Positioning accuracy	≤ ± 0.5 µm over 100 mm

Note: All statements concerning accuracy are based on a calibration temperature of 20 +/- 0.5 degrees C (68 +/- 1.0 degrees F). In an effort to continually improve our product performance, specifications are subject to change without notice. (Please consult your sales representative for our latest specifications)

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