



### Jig Grinding

**EXPERTS IN JIG GRINDER DESIGN, PRODUCTION AND OPERATIONS**

Moore Tool's Precision Manufacturing Center offers modern grinding techniques, cutting edge technology and jig grinding solutions. Custom processing and programming reduces cycle times, while providing a large work capacity up to 24 x 48 inches.

- ELECTRIC GRINDING HEAD CAPABILITIES
- MOORE AUTOSIZE® AUTOMATION
- MOORE AUTOGRIND® AUTOMATION
- W-AXIS 3-D CONTOURING
- A-AXIS ROTARY TABLE
- FLOOD COOLANT FOR BETTER SURFACE FINISH

### Metrology Department

**TRACEABLE TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY**

The Moore Tool Metrology Department is traceable to the National Institute of Standards and Technology (NIST). Located within the Precision Manufacturing Center, we calibrate our own inspection equipment, as well as the customer parts and gauges in-house. All production tools designed and manufactured by Moore Tool are held to the highest standards.

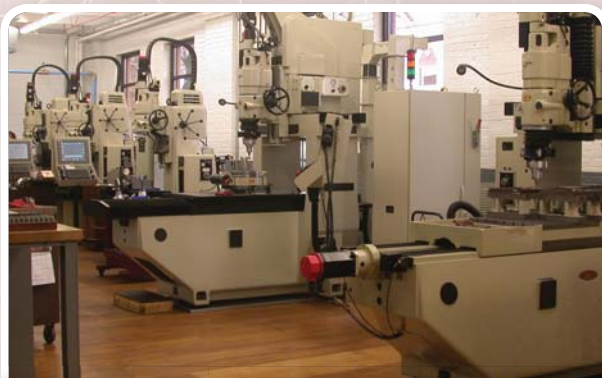
- CAPABILITY TO MEASURE IN MICRO INCHES
- FULL RANGE OF METROLOGY SERVICES AND EQUIPMENT
- UCMM FOR 3-D SCANNING
- MOORE MANUAL MEASURING MACHINES
- CONTRACT GAGE CALIBRATION AND CERTIFICATION



### Tool Room

**IN OPERATION FOR 85 YEARS**

Our Tool Room blends cutting edge technology with proven precision tool making processes for short-run and prototypical manufacturing. Our skilled technicians use their knowledge and experience to create parts to sub-micron accuracy, while holding the tightest geometric tolerances achievable.



#### INFO

**Moore Tool Company, Inc.**

800 Union Avenue  
Bridgeport, CT 06607-0088  
USA

Phone 203 366 3224  
Fax 203 367 0418

www.mooretool.com  
sales@mooretool.com

#### CONTACT

**Dale R. Gier**  
VICE PRESIDENT SALES  
drgier@ringprecision.com

**Ken Weimann**  
PRODUCT MANAGER  
kweimann@mooretool.com

**Peter Laskos**  
ENGINEERING MANAGER  
plaskos@mooretool.com

#### FTP

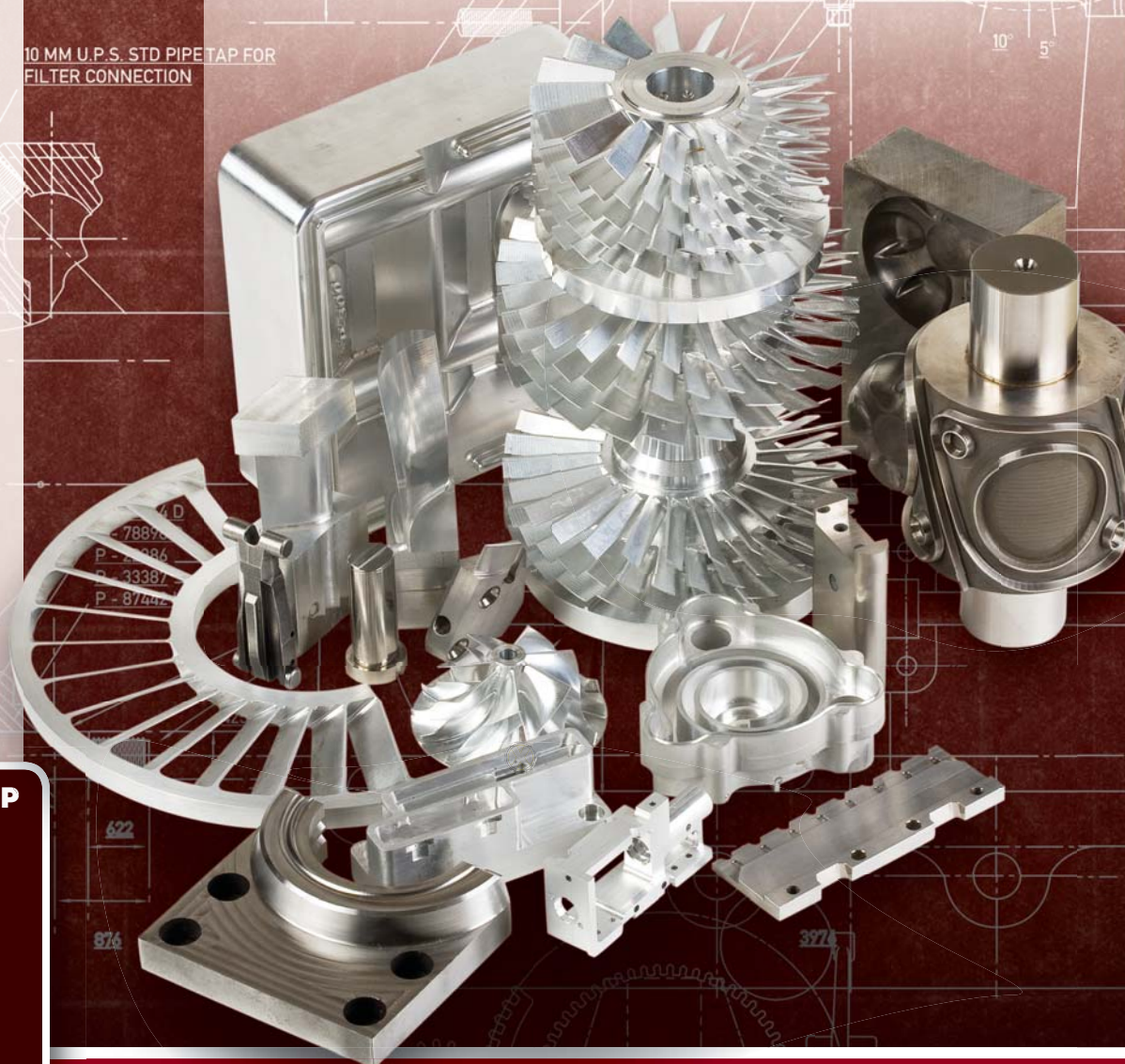
**File Transfer Protocol**

- 2D files in DXF
- 3D models in IGES
- detailed prints in PDF

## 5-Axis Machining

HIGH PERFORMANCE, MULTI-AXIS MACHINING

A leader in precision tool design and manufacturing, Moore Tool offers unique capabilities ranging from high performance 5-axis machining to precision jig grinding. Our 5-axis cell is set-up to manufacture precision parts, with difficult geometries, from a variety of materials. All parts are fully inspected to insure compliance with your specifications. Written certifications are available upon request.





The FSP300X offers a combination of high feed rates, spindle speeds, and acceleration. This results in faster turnaround for improved productivity and consistent accuracy to deliver a superior product.

## FSP 300X

### SOLUTIONS

Moore has the ability to process, program and deliver complex parts in days rather than weeks or months. Through superior engineering and manufacturing techniques, we have the capability to deliver high quality parts very quickly. Moore also has the capacity to satisfy all of your production requirements.



## FSP 300X specifications

### CAPACITY

Travel X axis	420 mm (16.54 in.)
Travel Y axis	320 mm (12.60 in.)
Travel Z axis	310 mm (12.20 in.)
Travel B axis	230 degrees (25+180+25)
Travel C axis	Infinite
B axis centerline to spindle nose (Z axis)	100 mm x 400 mm (3.94 – 15.75 in.)
Table Load	25 kg (55 lbs.)
Maximum Swing (C axis rotary)	300 mm (11.81 in.)

### SPEEDS AND FEEDS

Speed range	200 to 30,000 rpm
Spindle power	10 KW 13.4 HP
Maximum speed (B axis swivel)	140 rpm
Maximum speed (C axis rotary)	210 rpm
Rapid feedrate (X, Y, & Z axes)	30,000 mm/min. (1,181 IPM)
Contouring feedrate (X, Y, & Z axes)	20,000 mm/min. (787 IPM)
Maximum axis acceleration (X, Y, & Z axes)	16.6m/sec <sup>2</sup> (1.7 G)
Maximum axis acceleration (B axis swivel)	130 rad/sec <sup>2</sup>
Maximum axis acceleration (C axis workhead)	300 rad/sec <sup>2</sup>

### ACCURACY

#### POSITIONING: DIN/ISO 230-2

Positional uncertainty P: X, Y & Z axes	.004 mm (.00016 in.)
Positional uncertainty P: B & C axes	10 arc seconds
Positional uncertainty PA: X, Y & Z axes	.003 mm (.00012 in.)
Positional uncertainty PA: B & C axes	5 arc seconds

#### GEOMETRIC: STRAIGHTNESS

X, Y & Z axes	.005 mm (.0002 in.)
---------------	---------------------

#### GEOMETRIC: SQUARENESS

XY, XZ & YZ axes	.0076 mm (.0003 in.)
------------------	----------------------

