

# USACH 75

THE ECONOMICAL AND FLEXIBLE  
CNC ID / OD GRINDER





# USACH 75 OVERVIEW

The USACH 75 CNC cylindrical grinder delivers accuracy and power in a compact design for all production and/or universal small precision parts manufacturing where IDs, ODs and faces need grinding. This model is extremely flexible in handling a wide variety of workpieces for both job shops and high-production applications, especially where high-precision is required. The machine features an 8.5" swing diameter and handles parts up to 5" in length. The USACH 75 can be configured with up to three grinding spindles for maximum production capabilities and added flexibility.

## USACH 75

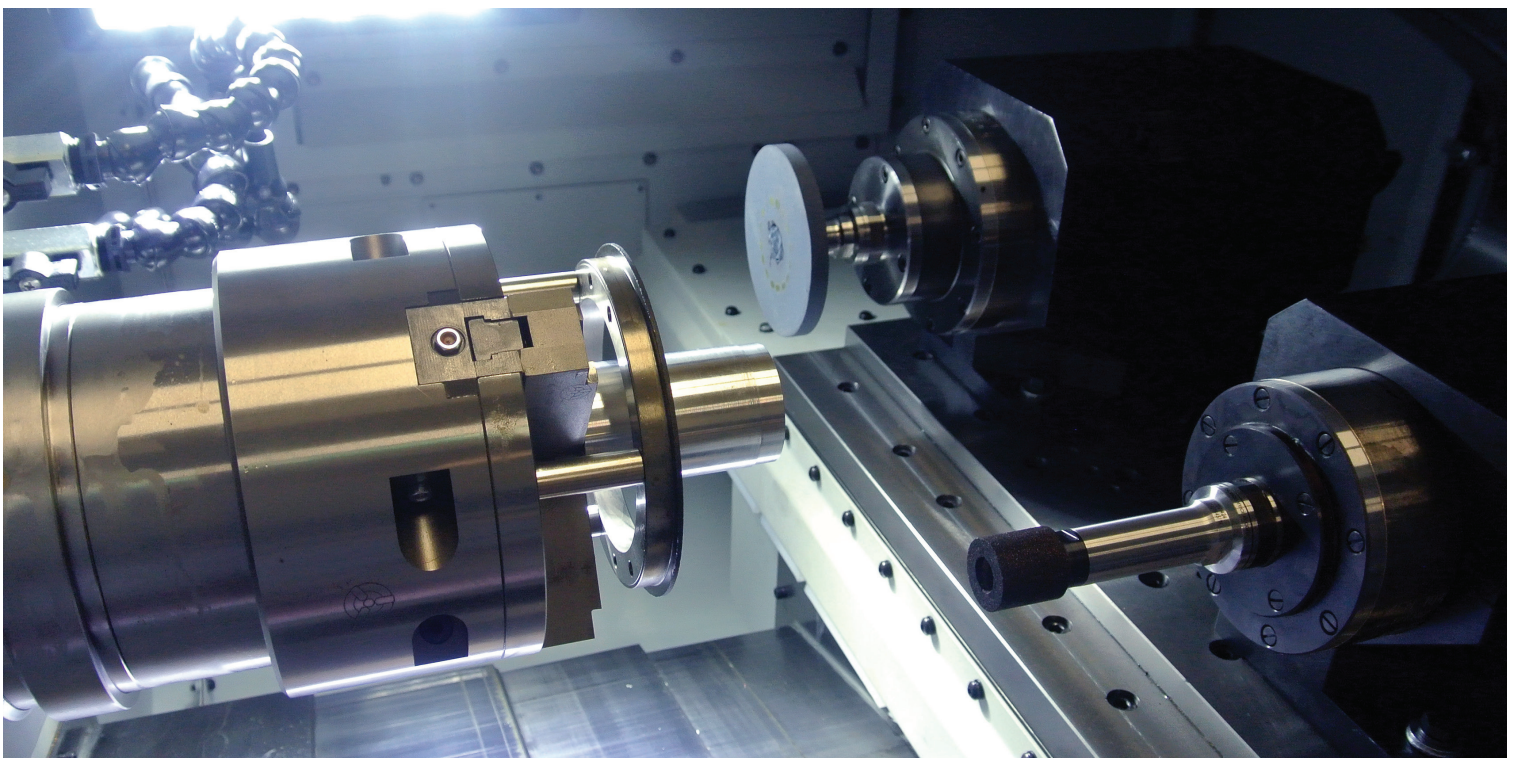
Grindable Bore	0.03" - 6"
X Axis travel	11.96" (304mm)
X Axis Rapid Traverse	472ipm/12mpm
Z Axis travel	10.41" (264mm)
Z Axis Rapid Traverse	630ipm/16mpm
Control	Fanuc or Mitsubishi

## STANDARD FEATURE

- Standard workhead with heavy ribbed construction allowing minimal heat retention and optimum part size control
- Standard mounting plate to accommodate up to (3) spindles
- I6C spindle standard
- Ethernet plug

## OPTIONAL FEATURE

- X and Z axis scales
- Life-greased or air/oil lubricated spindles
- Coolant system with or without integrated chiller
- 4" or 6" standard chuck
- Collet closer
- Renishaw probe
- Turning tool with holder



# MACHINE CONSTRUCTION

Spindle nose adaptable to a variety of different collet/chuck workholding systems.

Workhead assembly with heavy ribbed construction allows minimal heat retention and optimum part size control.

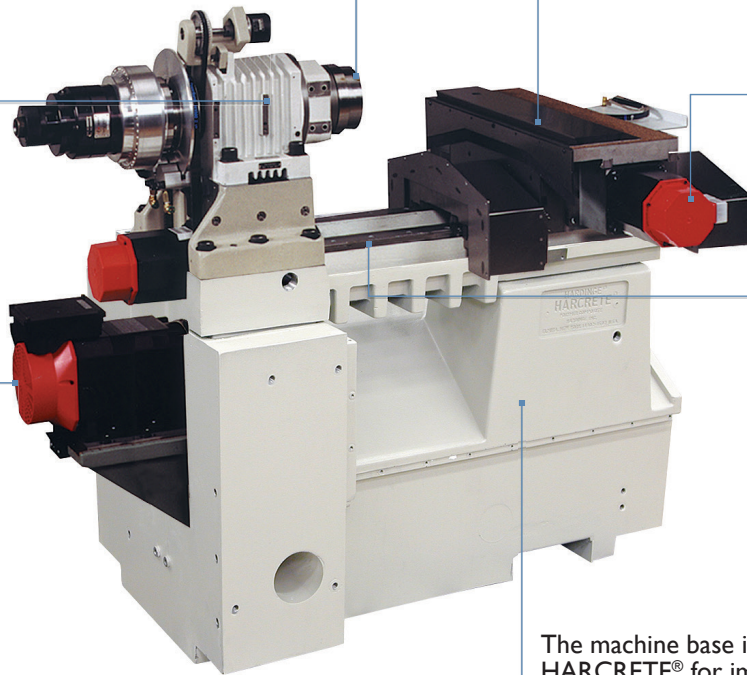
High dynamic axis speed with highest accuracy and short traveling distances between parts and dressing allow increased productivity.

AC digital servomotors are used for the X- and Z-axes for optimal machining accuracy.

The industry's most reliable motors and drives provide superior machining capability.

Longitudinal slide Z axis fully protected, on monorail style linear guideways with rollers, accommodating the X axis. Cross slide X axis fully protected, on monorail style linear guideways with rollers, accommodating the grinding spindle. Both slides are driven by AC servo motors and ballscrews.

The machine base is made from HARCRETE® for improved dynamic stability for highest precision tolerances and fine surface finishes.

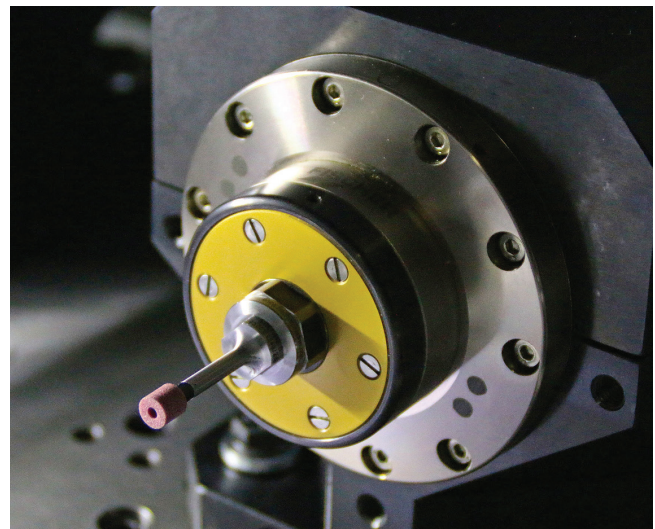


## DESIGNED FOR PERFORMANCE

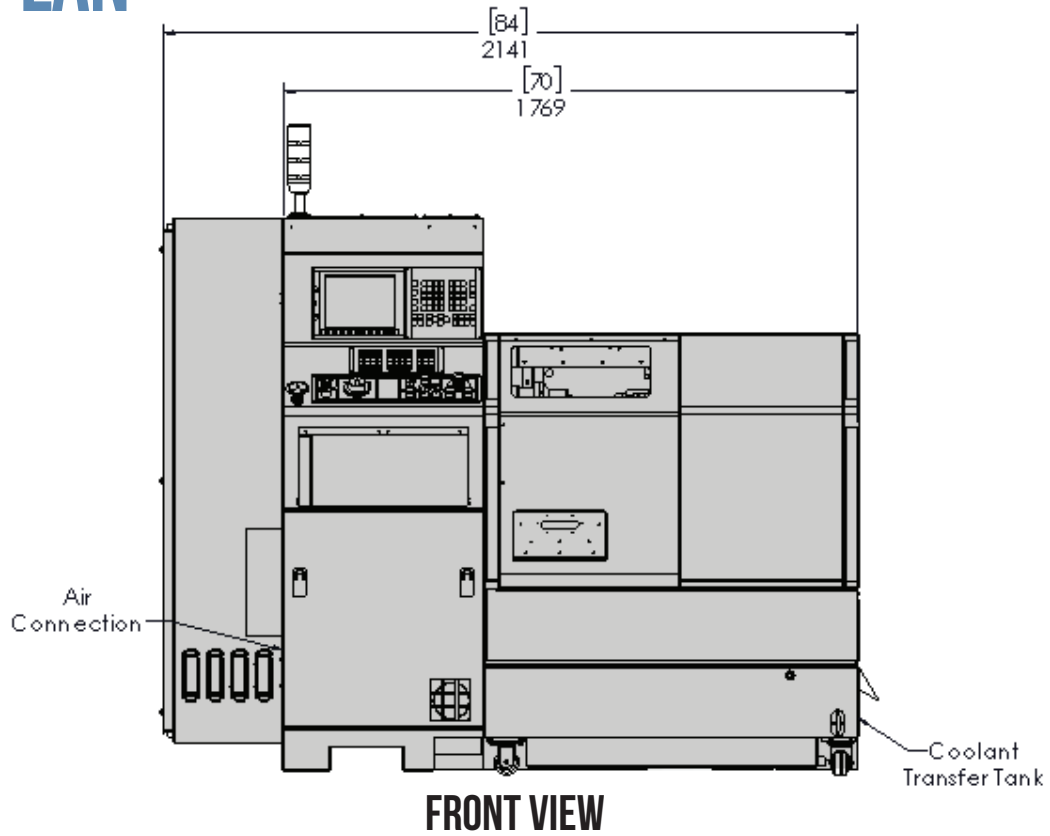
The latest software design platform and FEA (finite element analysis) techniques were used to design and build a rigid, structurally-balanced machine to assure optimum performance and machine life. The FEA software accurately depicts the structural deflection, stress levels, thermal response and vibration response of the assembled components and the assembled machine. Extreme-case loadings are used to verify adverse machining conditions.

## ACCURACY CERTIFICATION

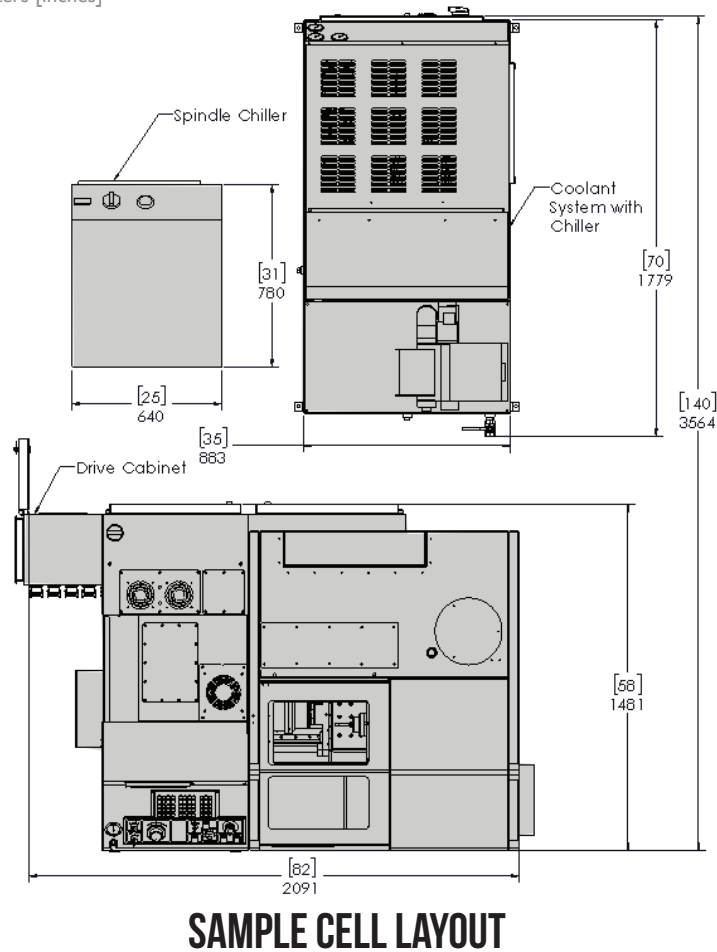
Accuracy certification is included as assurance that the machine is as accurate as we say.



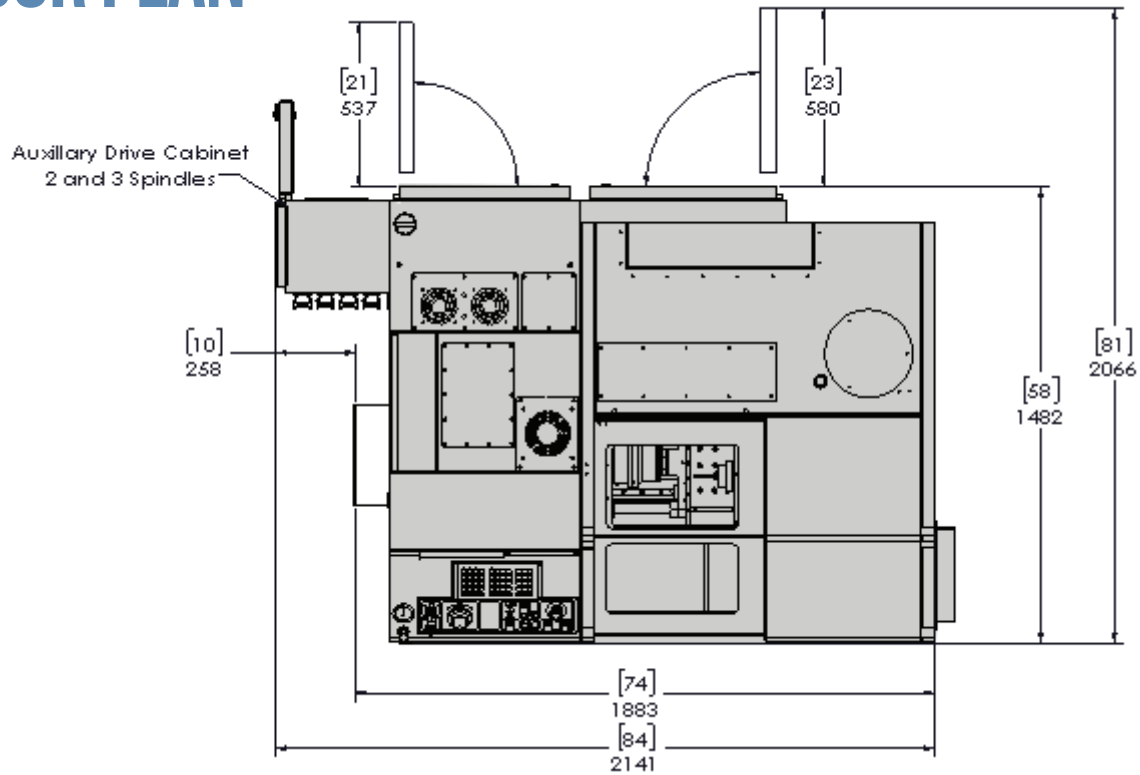
# FLOOR PLAN



Note: Dimensions shown in millimeters [inches]

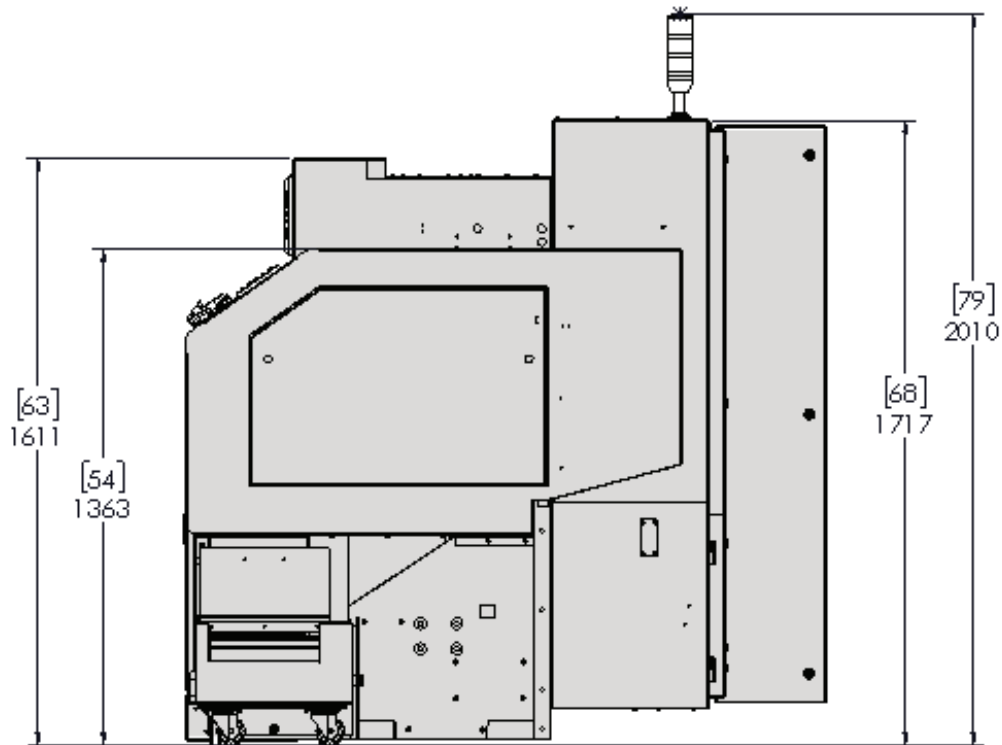


# FLOOR PLAN



**TOP VIEW**

Note: Dimensions shown in millimeters [inches]



**SIDE VIEW**



SEE THE USACH 75 IN ACTION:

# SCHEDULE A 1 ON 1 VITRUAL DEMO

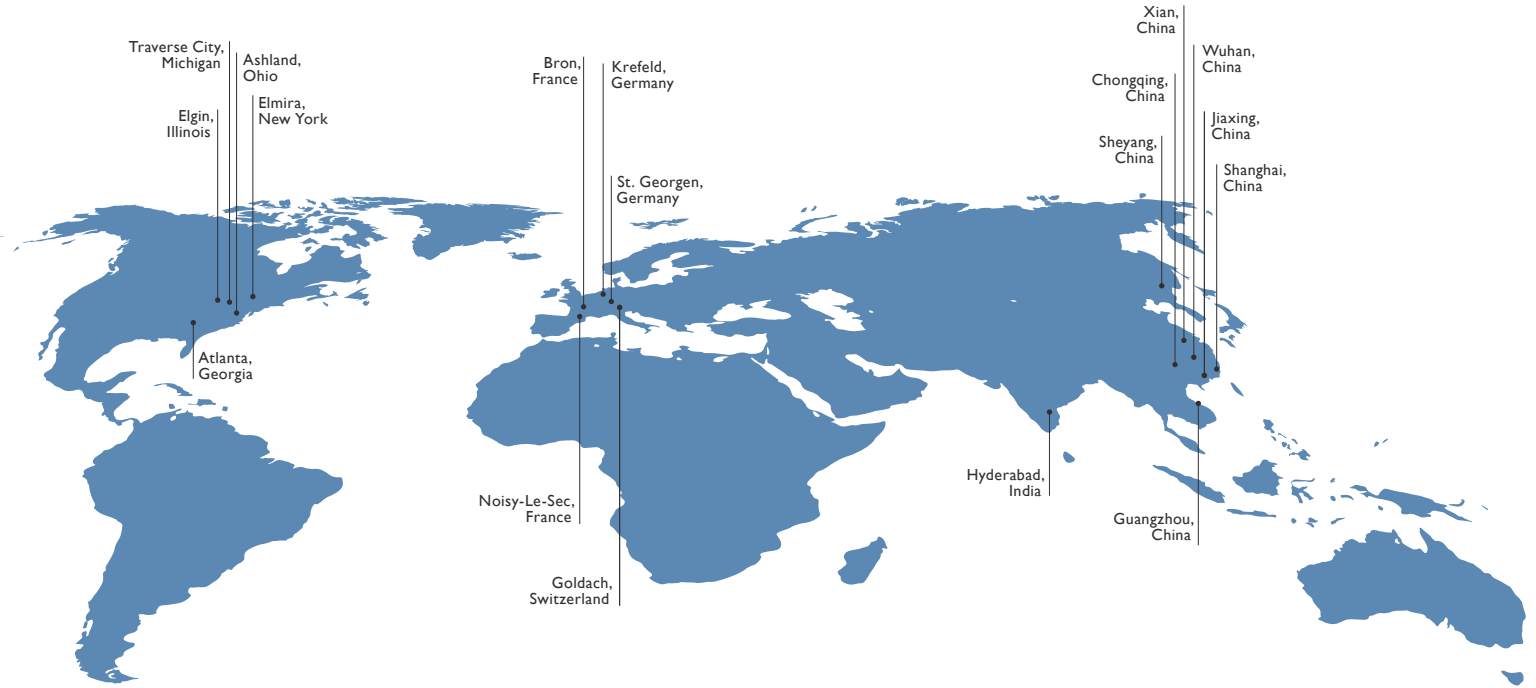
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We've developed a strong global presence with manufacturing operations in North America, Europe, and Asia. Hardinge applies its engineering and applications expertise to provide your company with the right machine tool solution and support every time.

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