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

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grindable Bore</td>
<td>0.03” - 6”</td>
</tr>
<tr>
<td>X Axis travel</td>
<td>11.96” (304mm)</td>
</tr>
<tr>
<td>X Axis Rapid Traverse</td>
<td>472ipm/12mpm</td>
</tr>
<tr>
<td>Z Axis travel</td>
<td>10.41” (264mm)</td>
</tr>
<tr>
<td>Z Axis Rapid Traverse</td>
<td>630ipm/16mpm</td>
</tr>
<tr>
<td>Control</td>
<td>Fanuc or Mitsubishi</td>
</tr>
</tbody>
</table>

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
- 16C 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

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

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

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

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.

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

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]

SAMPLE CELL LAYOUT
Note: Dimensions shown in millimeters [inches]
The Hardinge Group is a leading international provider of advanced metal-cutting solutions. We provide a full spectrum of highly reliable CNC turning, milling, and grinding machines as well as technologically advanced workholding accessories.

The diverse products we offer enable us to support a variety of market applications in industries including aerospace, agricultural, automotive, construction, consumer products, defense, energy, medical, technology, transportation and more.

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.

HARDINGE WORLDWIDE

**AMERICAS**

**Pennsylvania**
Hardinge Corporate
1235 Westlakes Drive
Suite 410
Berwyn, PA 19312

New York
Hardinge
One Hardinge Drive
Elmira, NY 14903
P. 800-843-8801
E. info@hardinge.com
www.hardinge.com

**Illinois**
Hardinge
1524 Davis Road
Elgin, IL 60123
P. 800.843.8801

**ASIA**

**China**
Hardinge Machine
(Shanghai) Co. Ltd.
1388 East Kangqiao Road
Pudong, Shanghai 201319
P. 0086 21 3810 8686

Taiwan
Hardinge Taiwan Precision
Machinery Limited
4 Tzu Chiang 3rd Road
Nan Tou City 540
Taiwan
P. 886 49 2260 536
E. cs@hardinge.com.tw

**EUROPE**

**France**
Jones & Shipman SARL
8 Allee des Ginkgos
BP 112 69672
Bron Cedex, France

**Germany**
Hardinge GmbH
Fichtenhain A 13c
47807 Krefeld
P. 49 2151 49649 10
E. info@hardinge-gmbh.de

**Switzerland**
L. Kellenberger & Co. AG
Heiligkreuzstrasse 28
CH 9008 St. Gallen
Switzerland
P. 41 71 2429111
E. info@kellenberger.net

**United Kingdom**
Jones & Shipman
Hardinge Ltd.
Europark, Unit 4 Watling Street
Rugby CV23 0AL, England
P. 44 116 201 3000
E. info@jonesshipman.com