



GRINDING

USACH 75

The economical
and flexible CNC
ID / OD Grinder



www.hardinge.com



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

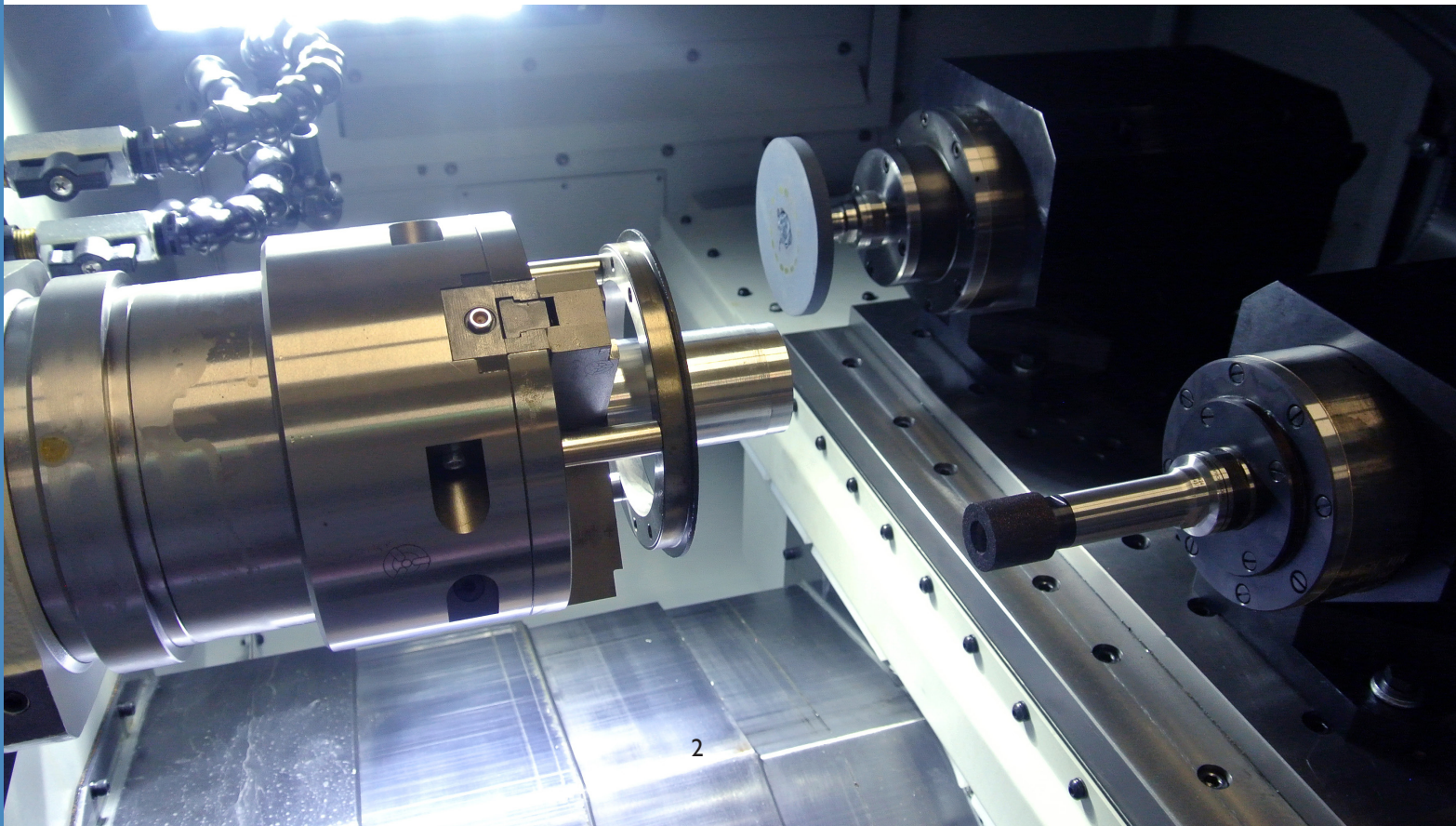
Grindable Bore	0.03" - 6"
X Axis travel	11.96" (304mm)
X Axis Rapid Traverse	472ipm/12mpm
Z Axis travel	10.41" (264mm)
Z Axis Rapid Traverse	630ipm/16mpm
Control	Fanuc or Mitsubishi

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

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.

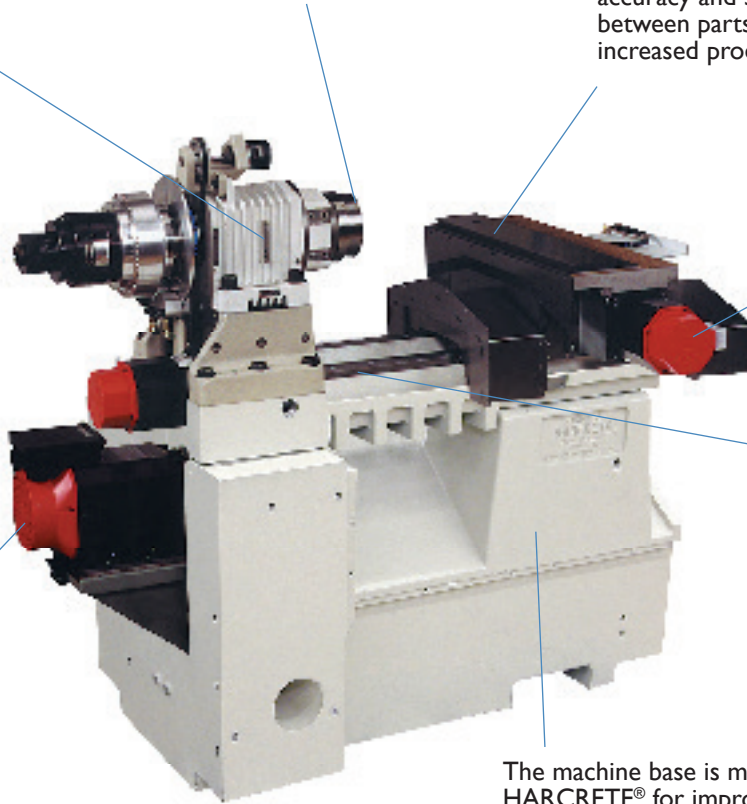
High dynamic axis speed with highest accuracy and short traveling distances between parts and dressing allow increased productivity.

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

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

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

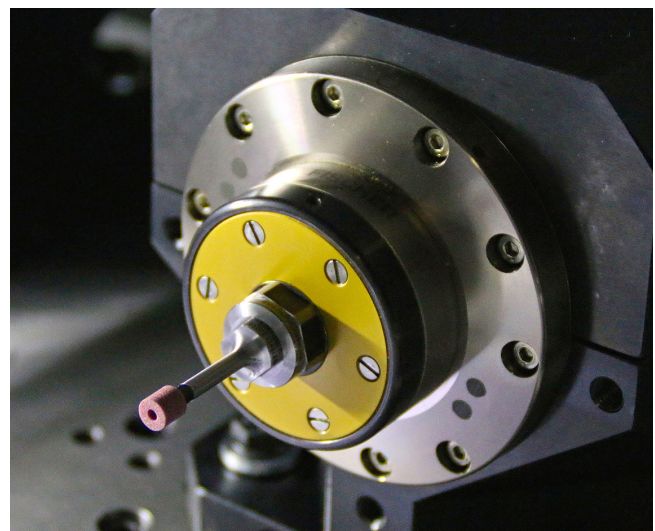


DESIGNED FOR PERFORMANCE

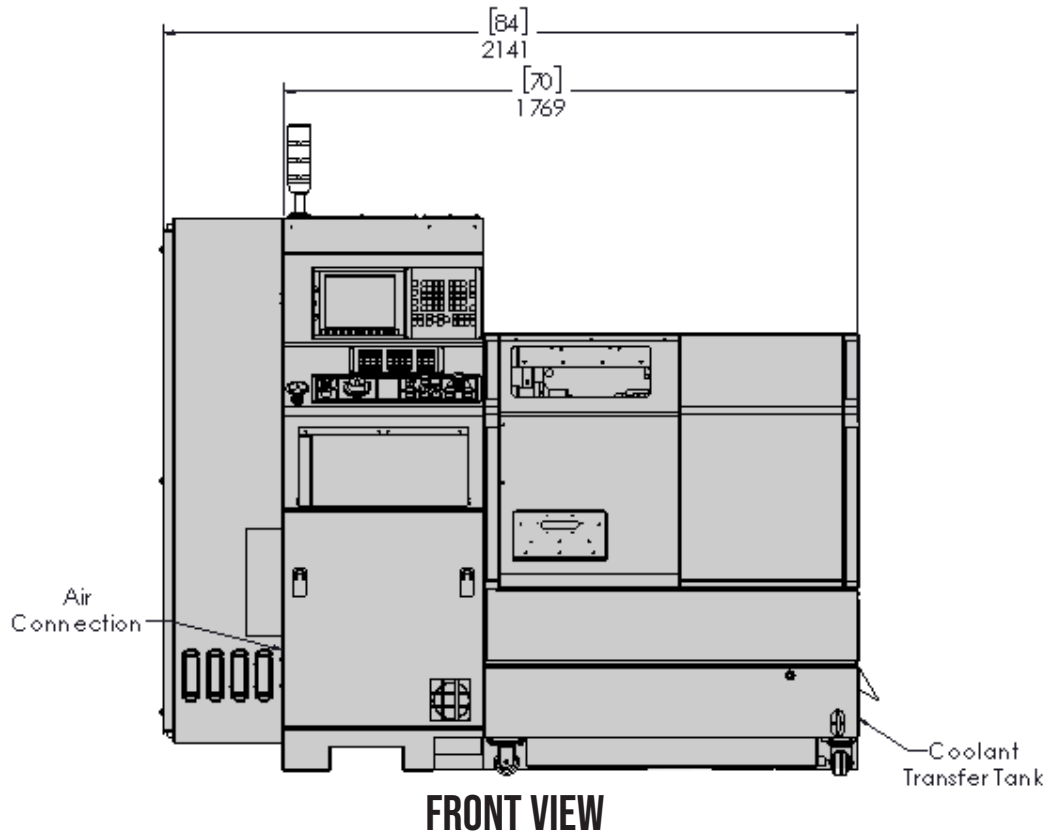
The latest software design platform and FEA (finite element analysis) techniques were used to design and build a rigid, structurally-balanced machine to assure optimum performance and machine life. The FEA software accurately depicts the structural deflection, stress levels, thermal response and vibration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

ACCURACY CERTIFICATION

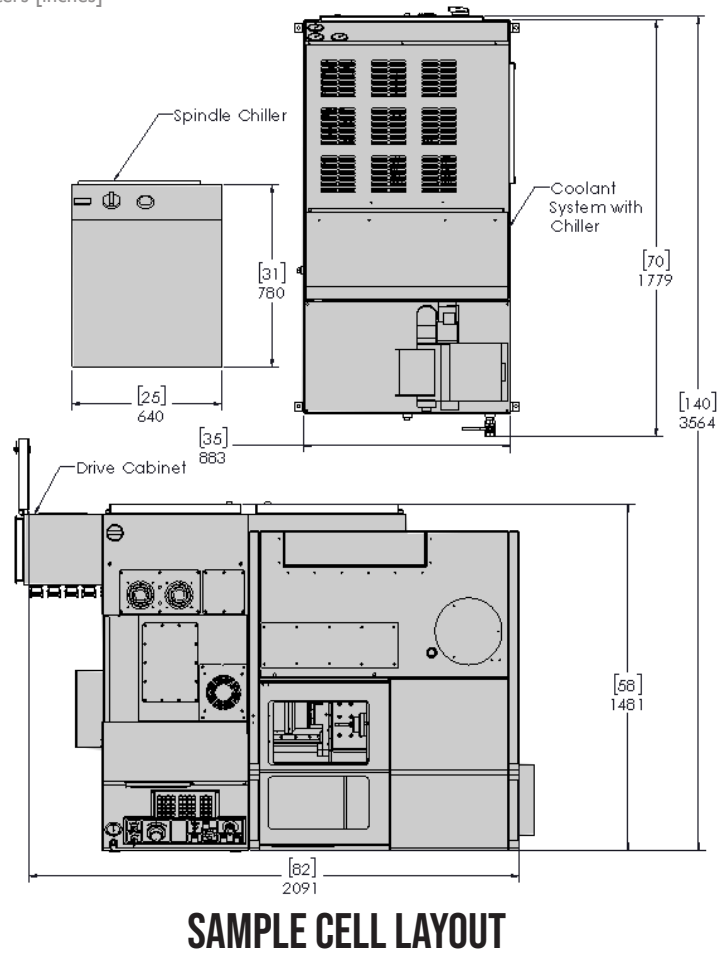
Accuracy certification is included as assurance that the machine is as accurate as we say.



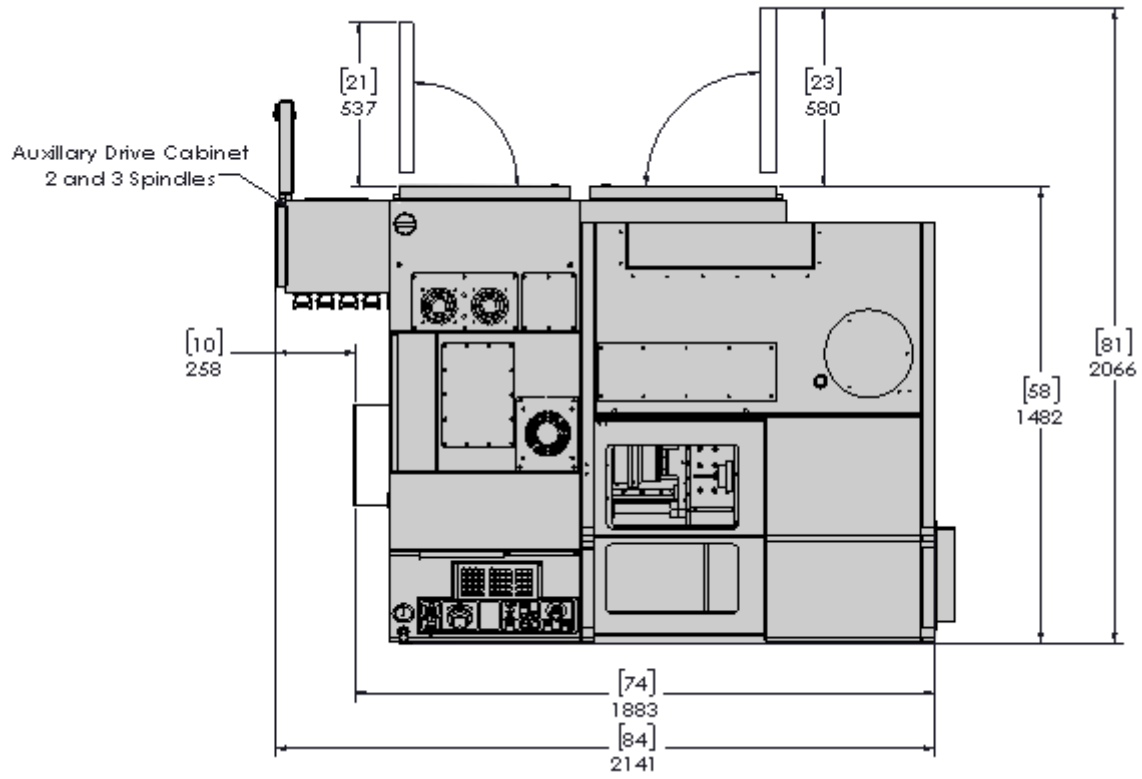
FLOOR PLAN



Note: Dimensions shown in millimeters [inches]

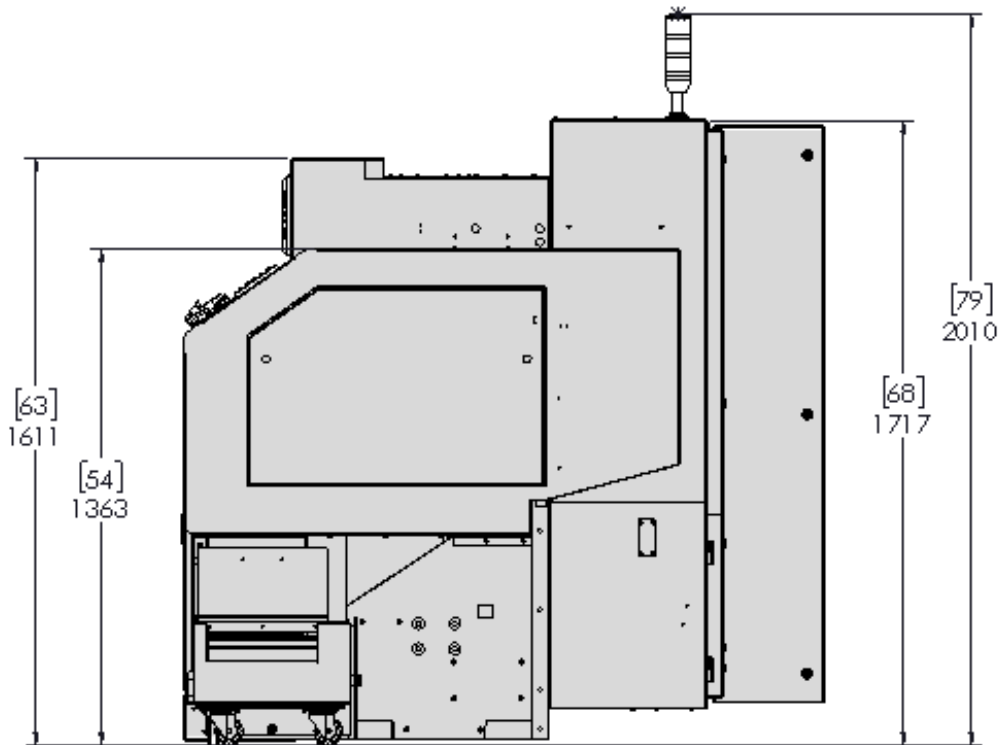


FLOOR PLAN

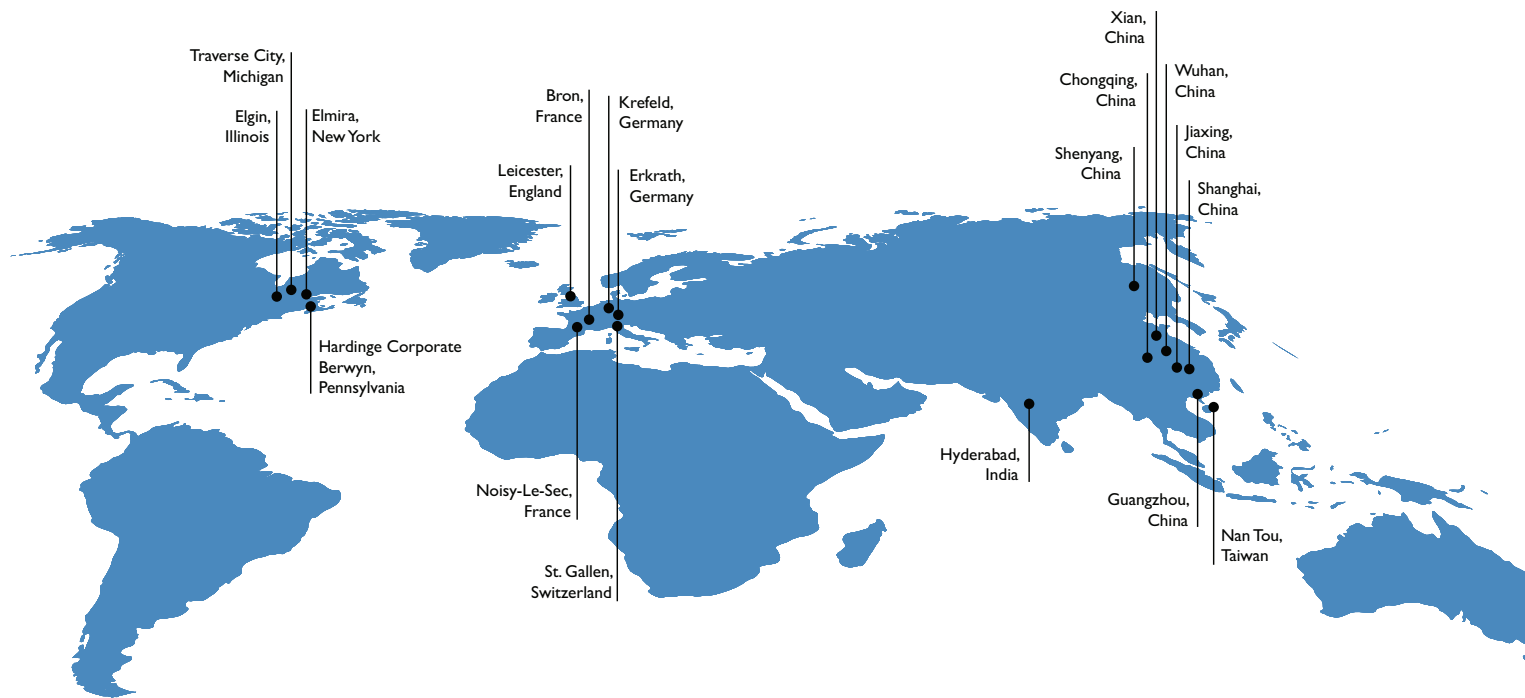


TOP VIEW

Note: Dimensions shown in millimeters [inches]



SIDE VIEW



HARDINGE WORLDWIDE

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.

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

