HARDINGE

PRODUCT OVERVIEW

AMERICAS

TURNING
MILLING
GRINDING
WORKHOLDING
ACCESSORIES

WWW.HARDINGE.COM

TURNING

SUPER-PRECISION® CNC Lathes

Performance CNC Lathes

MILLING

Performance VMCs

5-Axis VMCs

Manual Knee-Mill

GRINDING

OD / ID Cylindrical Grinding

Specialty

ID / OD Cylindrical Grinding

Jig Grinding

WORKHOLDING

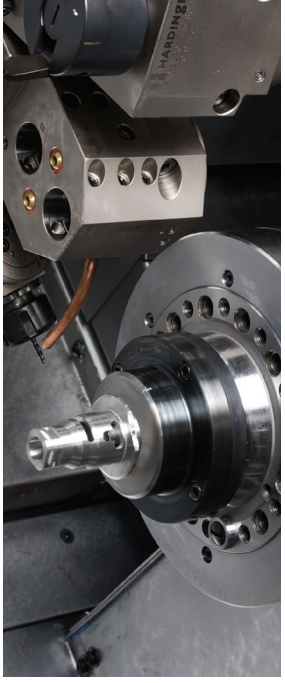
Collets

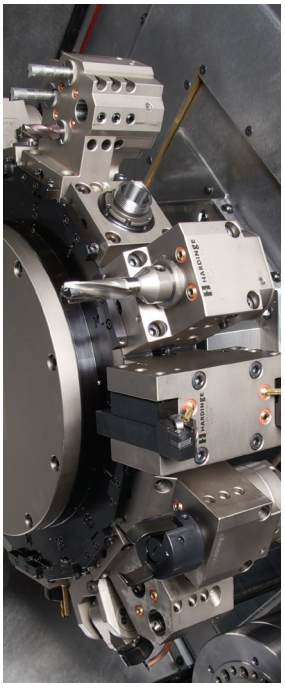
Custom Solutions

Indexers

Rotary Tables

T-SERIES





T SERIES

T-42

Chuck Size	6" (150mm)
Bar Size	1.625" (42mm)
Spindle HP	15 (11 kW)(30 min)
Spindle Speed	6,000 rpm
Turret Stations	16 (BMT-45)
CNC Control Unit	FANUC 31i
X-Axis Rapid Traverse	945-ipm (28 m/min)
Z-Axis Rapid Traverse	1200-ipm (38+ m/min)
Max Machining Length	14.2" (360.7 mm)
Max Machining Diameter	8.91" (226.3 mm)
Floor Space	98 x 83.5 x 82.25" (2489 x 2121 x 2084mm)
Approx. Weight	13,100 lbs (5940Kg)
Tooling Type	BMT45/Tstyle

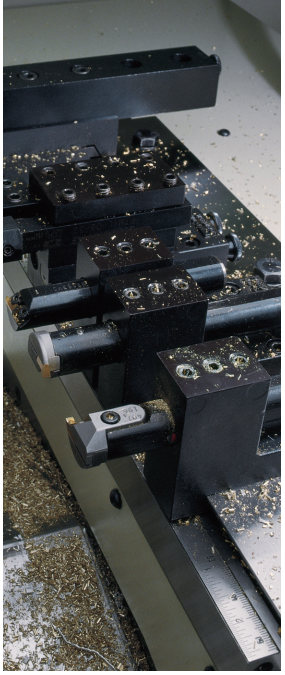
T-51

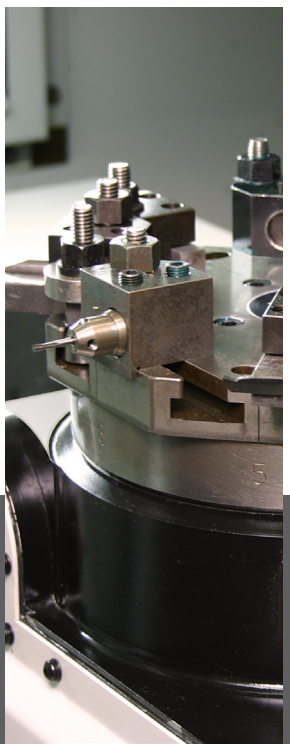
Chuck Size	8" (200mm)
Bar Size	2" (51mm)
Spindle HP	20 (15 kW)(30 min)
Spindle Speed	5,000 rpm
Turret Stations	12 (BMT-55)
CNC Control Unit	FANUC 31i
X-Axis Rapid Traverse	1100-ipm (28 m/min)
Z-Axis Rapid Traverse	1500-ipm (38 m/min)
Max Machining Diameter	12.35" (313.7 mm)
Max Machining Length	23.6" (599.5 mm)
Floor Space	128 x 91 x 83" (3257 x 2314 x 2123mm)
Approx. Weight	17,200 lbs (7800Kg)
Tooling Type	BMT55/Tstyle

T-65

Chuck Size	10" (250mm)
Bar Size	2.5" (65mm)
Spindle HP	35 (26 kW)(30 min)
Spindle Speed	4,000 rpm
Turret Stations	12 (BMT-55)
CNC Control Unit	FANUC 31i
X-Axis Rapid Traverse	1100-ipm (28 m/min)
Z-Axis Rapid Traverse	1500-ipm (38 m/min)
Max Machining Diameter	12.35" (313.7 mm)
Max Machining Length	23.6" (599.5 mm)
Floor Space	128 x 91 x 83" (3257 x 2312 x 2123mm)
Approx. Weight	17,900 lbs (5987Kg)
Tooling Type	BMT55/Tstyle

QUEST SERIES





QUEST SERIES

GT27

Chuck Size	4" (101mm)
Bar Size	1.062" (27mm)
Spindle HP	10 (7.5 kW)(30 min)
Spindle Speed	8,000 rpm
CNC Control Unit	FANUC 32iT
X-Axis Rapid Traverse	708 ipm (18 m/min)
Z-Axis Rapid Traverse	945 ipm (24 m/min)
Floor Space	77 x 58 x 64" (1956 x 1489 x 1628mm)
Approx. Weight	4,500 lbs (2040Kg)
Tooling Type	Gang-Style Top Plate

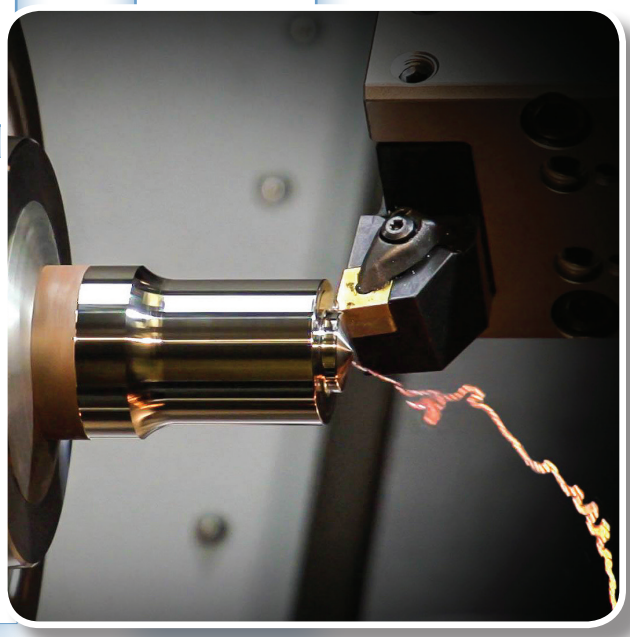
CHNC 27

Chuck Size	4" (101mm)
Bar Size	1.062" (27mm)
Spindle HP	10 (7.5 kW)(30 min)
Spindle Speed	8,000 rpm
CNC Control Unit	FANUC 32i Mitsubishi M70V
X-Axis Rapid Traverse	472 ipm/12 mpm
Z-Axis Rapid Traverse	630 ipm/16 mpm)
Floor Space	77" x 58" (1956mm x 1489mm)
Approx. Weight	5,220 lbs (2368Kg)
Tooling Type	1/2" sq./ 3/4" rd.

CHNC 42

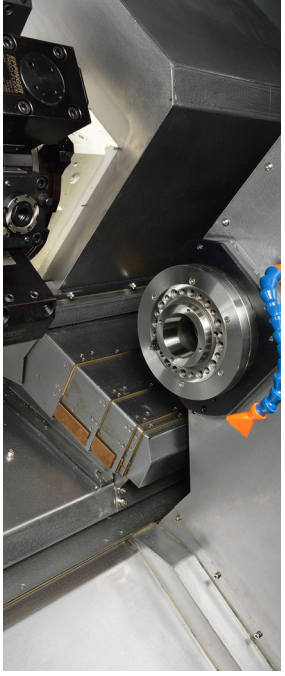
Chuck Size	6" (150mm)
Bar Size	1.625" (41.28mm)
Spindle HP	10 (7.5 kW)(30 min)
Spindle Speed	5,000 rpm
CNC Control Unit	FANUC 32i Mitsubishi M70V
X-Axis Rapid Traverse	472 ipm/12 mpm
Z-Axis Rapid Traverse	630 ipm/16 mpm)
Floor Space	77 x 58 x 64" (1956 x 1489 x 1628mm)
Approx. Weight	4,500 lbs (2040Kg)
Tooling Type	1/2" sq./ 3/4" rd.

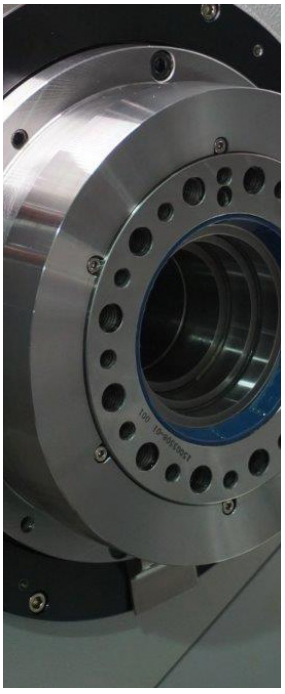
CONQUEST H51



Chuck Size	8" (200mm)
Bar Capacity	2" (51mm)
Spindle HP	20 (15 kW)(30 min)
Spindle Speed	5,000 rpm
Number of Turret Stations	12+1/2 (24 total)(BMT-55)
CNC Control Unit	FANUC 0iD or Mitsubishi 720
X-Axis Rapid Traverse	1100-ipm (28 m/min)
Z-Axis Rapid Traverse	1500-ipm (38 m/min)
Max Machining Diameter	12.34" (313.7 mm)
Max Machining Length	25.533" (648.5 mm)
Y-Axis Rapid Traverse	236-ipm (6 m/min)
Floor Space	120" x 103" x 85" (3048 x 2616 x 2151mm)
Approx. Weight	13,500 lbs (6120Kg)
Tooling Type	BMT55/Tstyle

TALENT SERIES





TALENT SERIES

TALENT 42 MY SHORT BED

Chuck Size	5.9" (150mm)
Bar Size	1.65" (42mm)
Spindle HP	14.75 (11 kW)
Spindle Speed	6,000 rpm
CNC Control Unit	FANUC OiTF
X, Z-Axis Rapid Traverse	30 m/min (1181 ipm)
Y-Axis Rapid Traverse	10 m/min (394 ipm)
Floor Space	101.1" x 71.42" x 76.06" (2567 x 1814 x 1932mm)
Approx. Weight	10,802 lbs (4900kg)
Tooling Type	BMT 45

TALENT 42 MYT, MSY STANDARD BED

Chuck Size	5.9" (150mm)
Bar Size	1.65" (42mm)
Spindle HP	14.75 (11 kW)
Spindle Speed	6,000 rpm
CNC Control Unit	FANUC OiTF
X, Z-Axis Rapid Traverse	30 m/min (1181 ipm)
Y-Axis Rapid Traverse	10 m/min (394 ipm)
Floor Space	114.69" x 71.42" x 76.06" (2913 x 1814 x 1932mm)
Approx. Weight	12,786lbs (5800 kg)
Tooling Type	BMT 45

TALENT 51 MY SHORT BED

Chuck Size	8" (203 mm)
Bar Size	2" (51 mm)
Spindle HP	14.75 (11 kW)
Spindle Speed	5,000 rpm
CNC Control Unit	FANUC OiTF
X, Z-Axis Rapid Traverse	30 m/min (1181 ipm)
Y-Axis Rapid Traverse	10 m/min (394 ipm)
Floor Space	101.1" x 71.42" x 76.06" (2567 x 1814 x 1932mm)
Approx. Weight	10,802 lbs (4900kg)
Tooling Type	BMT 45

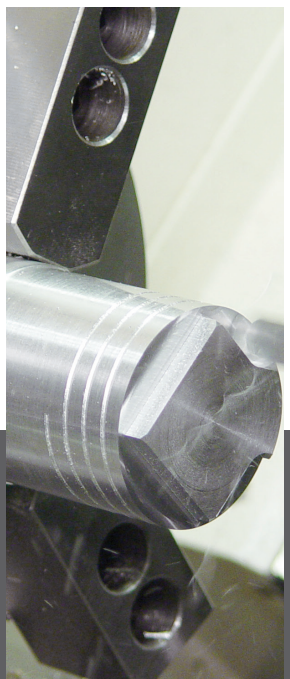
TALENT 51 MYT, MSY STANDARD BED

Chuck Size	8" (203 mm)
Bar Size	2" (51 mm)
Spindle HP	14.75 (11 kW)
Spindle Speed	5,000 rpm
CNC Control Unit	FANUC OiTF
X, Z-Axis Rapid Traverse	30 m/min (1181 ipm)
Y-Axis Rapid Traverse	10 m/min (394 ipm)
Floor Space	114.69" x 71.42" x 76.06" (2913 x 1814 x 1932mm)
Approx. Weight	12,786lbs (5800 kg)
Tooling Type	BMT 45

TALENT GT42

Bar Size	1.65" (42mm)
Spindle HP	10 (Cont.) (7.5 kW)
Spindle Speed	6,000 rpm
CNC Control Unit	FANUC OiTF
X, Z-Axis Rapid Traverse	32m/min (1260 ipm)
Y-Axis Rapid Traverse	24m/min (945 ipm)
Floor Space	75.98" x 101.06" x 71.42" (1936 x 1970 x 1660mm)
Approx. Weight	4,500 lbs (2040kg)

GS SERIES



GS SERIES

GS 150

Chuck Size_____6" (150mm)
Bar Size_____1.77" (45mm)
Spindle HP_____24.7 (18.5kw) high speed; 15 (11kw) low speed
Spindle Speed_____6,000rpm (high speed); 1,500rpm (low speed)
Turret Stations_____12
CNC Control Unit_____FANUC 32 bit OiTF
X-Axis Rapid Traverse_____1,181 ipm (30 mpm)
Z-Axis Rapid Traverse_____1,181 ipm (30 mpm)
Max Machining Diameter_____11.10" (284 mm)
Max Machining Length_____15.98" (406 mm)
Floor Space_____78.66" x 65" x 70.12" (1998 x 1650 x 178mm)
Approx. Weight_____5940 lbs (2694 kg)

GS 200

Chuck Size_____8" (200mm)
Bar Size_____2.05" (200mm)
Spindle HP_____24.7 (18.5kw) high speed; 15 (11kw) low speed
Spindle Speed_____5,000rpm (high speed); 1,250rpm (low speed)
Turret Stations_____12
CNC Control Unit_____FANUC 32 bit OiTF
X-Axis Rapid Traverse_____1,181 ipm (30 mpm)
Z-Axis Rapid Traverse_____1,181 ipm (30 mpm)
Max Machining Diameter_____11.10" (284 mm)
Max Machining Length_____15.98" (406 mm)
Floor Space_____78.66" x 65" x 70.12" (1998 x 1650 x 178mm)
Approx. Weight_____6160 lbs (2794 kg)

GS 250

Chuck Size_____10" (254 mm)
Bar Size_____3.070" (78mm)
Spindle HP_____35 (26kw) high speed; 25 (18.5kw) low speed
Spindle Speed_____3,500rpm (high speed); 875rpm (low speed)
Turret Stations_____12
CNC Control Unit_____FANUC 32 bit OiTF
X-Axis Rapid Traverse_____1,181 ipm (30 mpm)
Z-Axis Rapid Traverse_____1,181 ipm (30 mpm)
Max Machining Diameter_____14.02" (356 mm)
Max Machining Length_____23.62" (600 mm)
Floor Space_____117" x 84" x 71" (2988 x 3476 x 2142mm)
Approx. Weight_____11,583 lbs (5265 kg)

GX SERIES

GX 300

Travels: X,Y,Z_____11.80" x 15.76" x 16.94"
(299 x 400 x 430mm)
Spindle HP_____20 (30 min) (14.71kW)
Spindle Speed_____7,083 rpm
Torque_____98.8 ft-lbs (133.95Nm)
Tool Changer_____20 Station Swing Arm ATC
Control Type_____FANUC OiMD
Floor Space_____57" x 100" x 93"
(1447 x 2540 x 2362mm)
Approx. Weight____10,900 lbs (4944 kg)

GX 510

Travels: X,Y,Z_____20" x 15.76" x 16.94"
(508 x 400 x 430mm)
Spindle HP_____20 (30 min) (14.71kW)
Spindle Speed_____7,083 rpm
Torque_____98.8 ft-lbs (133.95Nm)
Tool Changer_____20 Station Swing Arm ATC
Control Type_____FANUC OiMD
Floor Space_____60" x 100" x 93"
(1524 x 2540 x 2362mm)
Approx. Weight____11,200 lbs (5080 kg)

GX 1600

Travels: X,Y,Z_____63" x 27.5" x 25"
(1600 x 700 x 635mm)
Spindle HP_____15/20/24.8 (11/15/26kW)
Spindle Speed_____10,000 rpm
Torque_____104ft./lbs (141Nm)
Tool Changer_____30 Station Swing Arm ATC
Control Type_____i-Series GX
Floor Space_____116" x 86" x 106"
(2955 x 2190 x 2713mm)
Approx. Weight____21,560 lbs (9800 kg)

V SERIES

V480

Travels: X,Y,Z_____18.9" x 15.75" x 16.93"
(480 x 400 x 430mm)
Spindle HP_____7.5 / 10
Spindle Speed_____10,000 rpm
Torque_____35 ft-lbs (133.95Nm)
Tool Changer_____20 Station Swing Arm ATC
Control Type_____Mitsubishi M70 Type A
Floor Space_____106.96 x 104.69"
(2716 x 2659mm)
Approx. Weight____8,378 lbs (3800 kg)

V510

Travels: X,Y,Z_____20.07" x 15.75" x 16.93"
(518 x 400 x 430mm)
Spindle HP_____7.5 / 10
Spindle Speed_____10,000 rpm
Torque_____35 ft-lbs (133.95Nm)
Tool Changer_____20 Station Swing Arm ATC
Control Type_____Mitsubishi M70 Type A
Floor Space_____60.04 x 99.40"
(1524 x 2525mm)
Approx. Weight____8,613 lbs (3907 kg)

V710

Travels: X,Y,Z_____27.9" x 15.75" x 16.93"
(708 x 400 x 430mm)
Spindle HP_____7.5 / 10
Spindle Speed_____10,000 rpm
Torque_____35 ft-lbs (133.95Nm)
Tool Changer_____20 Station Swing Arm ATC
Control Type_____Mitsubishi M70 Type A
Floor Space_____111.3 x 104.69"
(2827 x 2659mm)
Approx. Weight____8,613 lbs (3907 kg)

V SERIES

V320 5F

Travels: X,Y,Z_____20.08" x 24.01" x 20.08"
(510 x 610 x 510mm)
Spindle HP_____30 (22kW)
Spindle Speed_____10,000 rpm
(12,000 / 15,000 option)
Spindle Taper_____No. 40
Torque_____55 / 75 / 110 ft. lb
(75/102/148 Nm)
Tool Changer_____30 Station
Control Type_____Mitsubishi M80
Floor Space_____144.22" x 118.12" x 125.40"
(3,663 x 3,000 x 3,185mm)
Approx. Weight____16,050 lbs (7,280 kg)

V480 APC

Travels: X,Y,Z_____18.9" x 15.75" x 16.93"
(480 x 400 x 430mm)
Spindle HP_____7.5 / 10
Spindle Speed_____10,000 rpm
Torque_____35 ft-lbs (133.95Nm)
Tool Changer_____20 Station Swing Arm ATC
Control Type_____Mitsubishi M70 Type A
FANUC 0iMD
Floor Space_____106.97" x 109.37"
(2717 x 2777mm)
Approx. Weight____9,833 lbs (4460 kg)

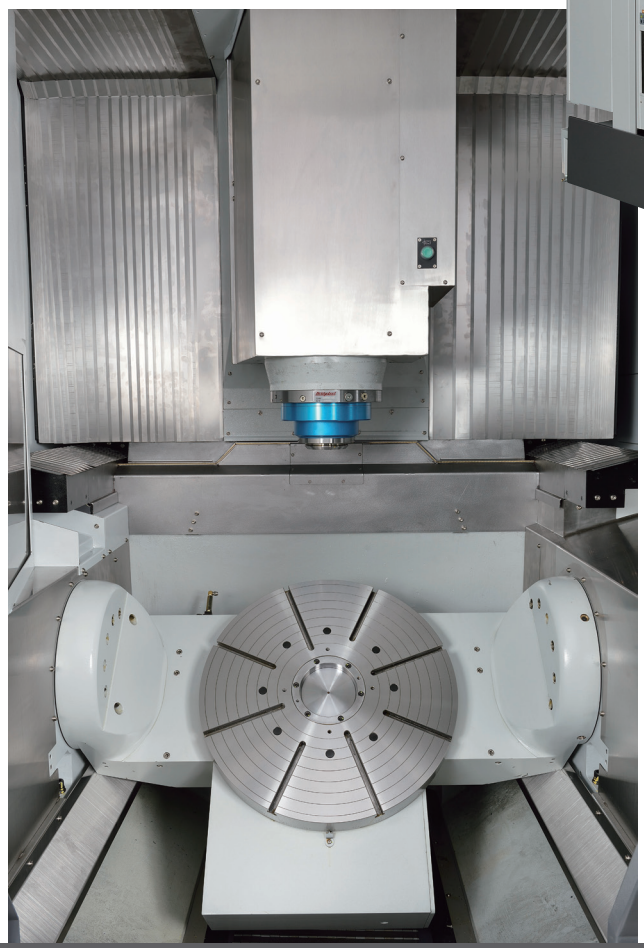
V1000

Travels: X,Y,Z_____40.1" x 24" x 24"
(1020 x 610 x 610mm)
Working Surface____47.2" x 23.6"
(1200 x 600mm)
Spindle Taper_____BIG PLUS® No. 40
Spindle HP_____20 / 25 / 24.5
(CT/15min/30min)
Spindle Speed_____10,000 rpm (opt. 12,000)
Tool Changer_____30 Swing Arm ATC
Control Type_____Mitsubishi M70 Type A
Floor Space_____105 x 120 x 112"
(2673 x 3048 x 2850mm)
Approx. Weight____14,400 lbs (7000 kg)

5-AXIS VMC

XT630

Travels: X,Y,Z_____30" x 24.8" x 24"
(762 x 630 x 610mm)
Spindle HP_____17.5 (13 kW)
Spindle Speed_____15,000 rpm
Torque_____65.27 ft/lb (88.5 Nm)
Tool Changer_____48 Station Swing Arm ATC
Control Type_____Siemens 840D
Floor Space_____140" x 102" x 182"
(3536 x 2572 x 4623mm)
Approx. Weight____32,187 lbs (14,600 kg)



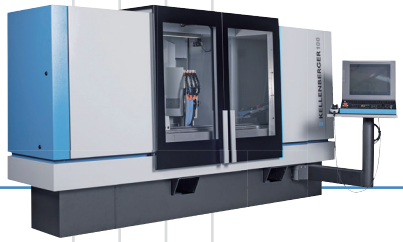
SERIES-1

SERIES-1

Table Size	49" x 9"
Table Travel	36"
Saddle Travel	12"
Knee Travel	16"
Horsepower	2 (3HP 30 min.)

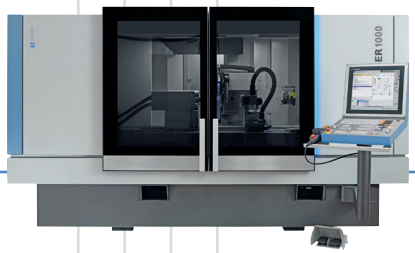
OD/ID CYLINDRICAL

Kellenberger was established in 1917 and is specializing in the development and production of hydraulically and numerically controlled precision grinding machines and systems for the application in the field of medium and high technology.



KELLENBERGER 100

Center Height_____200mm
Distance Between Center_____600 / 1000mm



KELLENBERGER 1000

Center Height_____200 / 250 / 300mm
Distance Between Center_____1000/1600mm

KELLENBERGER VISTA SE

Center Height_____175mm
Distance Between Center_____1000mm

JONES & SHIPMAN 650 & 1000

Center Height_____160mm
Distance Between Center_____720mm / 1000mm

OD/ID CYLINDRICAL

Tschudin grinding machines offer a compact, straight and angle head grinding machines for small lots to high volume production provide grinding solutions for unique applications such as fuel injection parts.

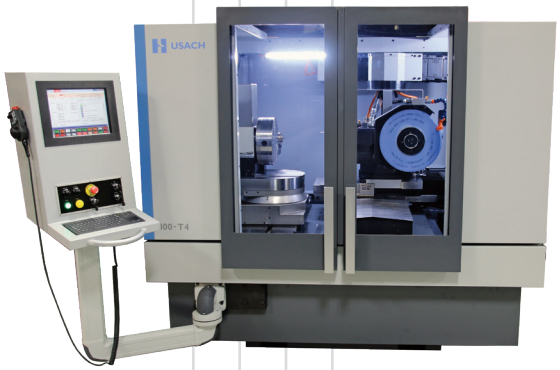
TSCHUDIN T-25

Center Height_____125mm
Distance Between Center_____400mm

TSCHUDIN T-35

Center Height_____125mm
Distance Between Center_____600mm

SPECIALTY



Usach is an American machine tool company dedicated to the manufacturing of high precision ID and OD grinding systems.

Usach was founded in 1985. Since then, we have built a highly qualified team of engineers. Our focus is to address the demands of companies looking for a partner with whom to work in finding solutions to today's ever more challenging high precision grinding applications and automation projects.

USACH SPECIALTY ID & OD/ID GRINDERS

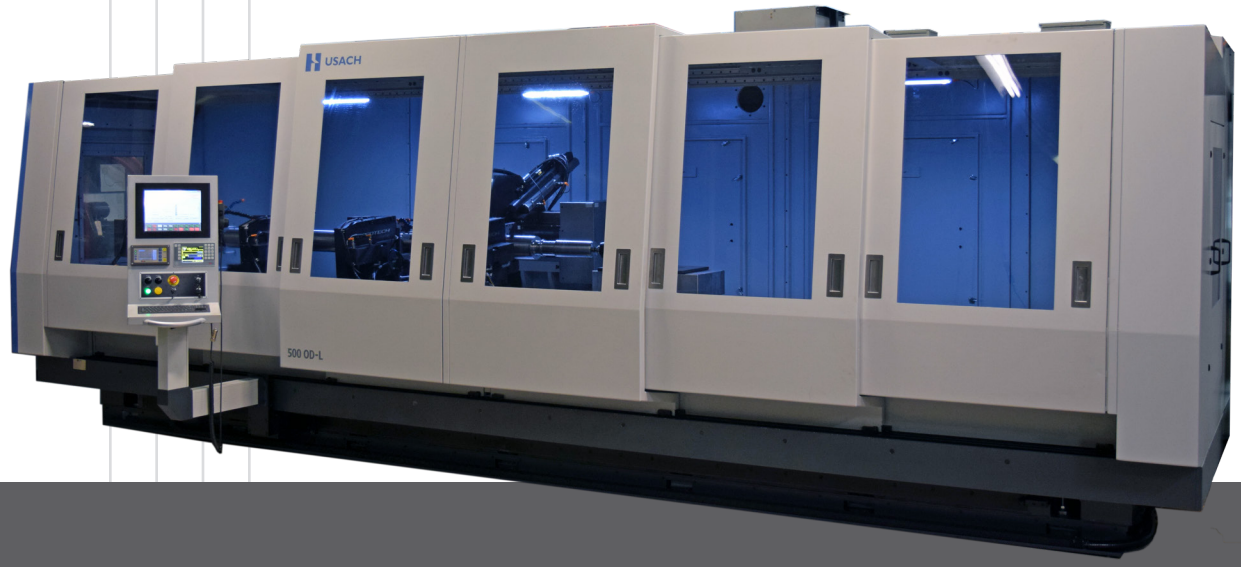
Swing Diameters

Usach 100	450mm
Usach 150	610mm
Usach 200	812mm

USACH SPECIALTY OD GRINDERS

Part lengths

Usach 75	150mm
Usach 100	500mm
Usach 150	1200mm
Usach 200	2000mm
Usach 300	3500mm
Usach 500	5000mm

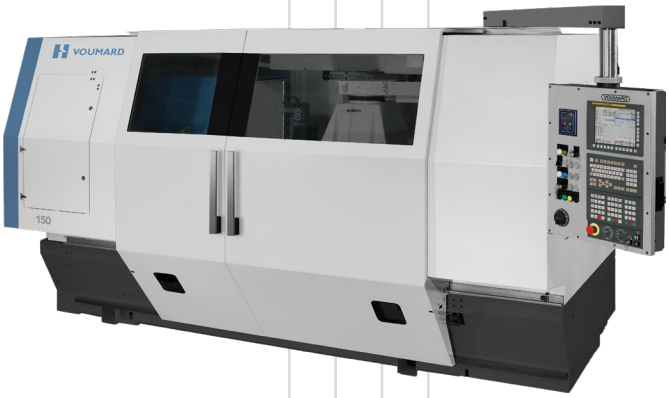


ID/OD CYLINDRICAL

VOUMARD high productivity grinding machines are designed for flexible ID and OD grinding operations. Highly accurate chucks and centerless work holding solutions allow for processing work pieces of almost every geometry and performing multiple internal and external grinding operations in a single clamping.

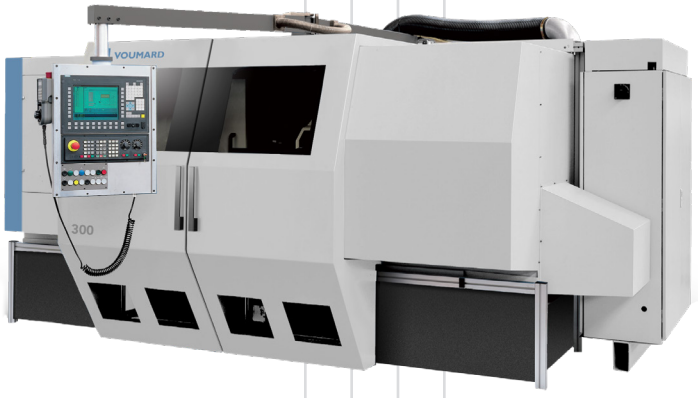
VOUMARD 110

Floor Space_____2000 x 1560 x 2100mm



VOUMARD 150

Floor Space
Version L7_____3500 x 2000 x 2150mm
Version L13_____4450 x 2000 x 2150mm
Version L15_____4450 x 2000 x 2150mm



VOUMARD 300

Floor Space
Version L7_____5518 x 3965 x 2179mm
Version L13_____6474 x 4115 x 2179mm

JIG GRINDING

HAUSER jig grinding machines traditionally cater to the niche of highly accurate grinding work in tool and mold fabrication, as well as grinding production of demanding small series. The new development realized by Hauser is aimed at a pronounced increase in productivity as well as a significant improvement in achievable processing precision.

HAUSER H35

Range of Adjustment (X,Y)_____500 x 300mm

HAUSER H45

Range of Adjustment (X,Y)_____700 x 500mm

HAUSER H55

Range of Adjustment (X,Y)_____1300 x 800mm

HAUSER 2000

Range of Adjustment (X,Y)_____550 x 300mm

Spindle Tooling for
Manual and CNC Lathes

Spindle Tooling for
Automatic Turret Lathes
& Rotary Transfer
Machines

Swiss-Type Collets,
Guide Bushings
& Barloader Collets

FlexC™ Vulcanized,
Quick-Change Collet Systems

HCAC® Collet
Adaptation Chucks

Sure-Grip®
Expanding Collet Systems

Custom Workholding

3-Jaw Power Chucks
and Chuck Jaws
Manual Scroll
Chucks from Buck

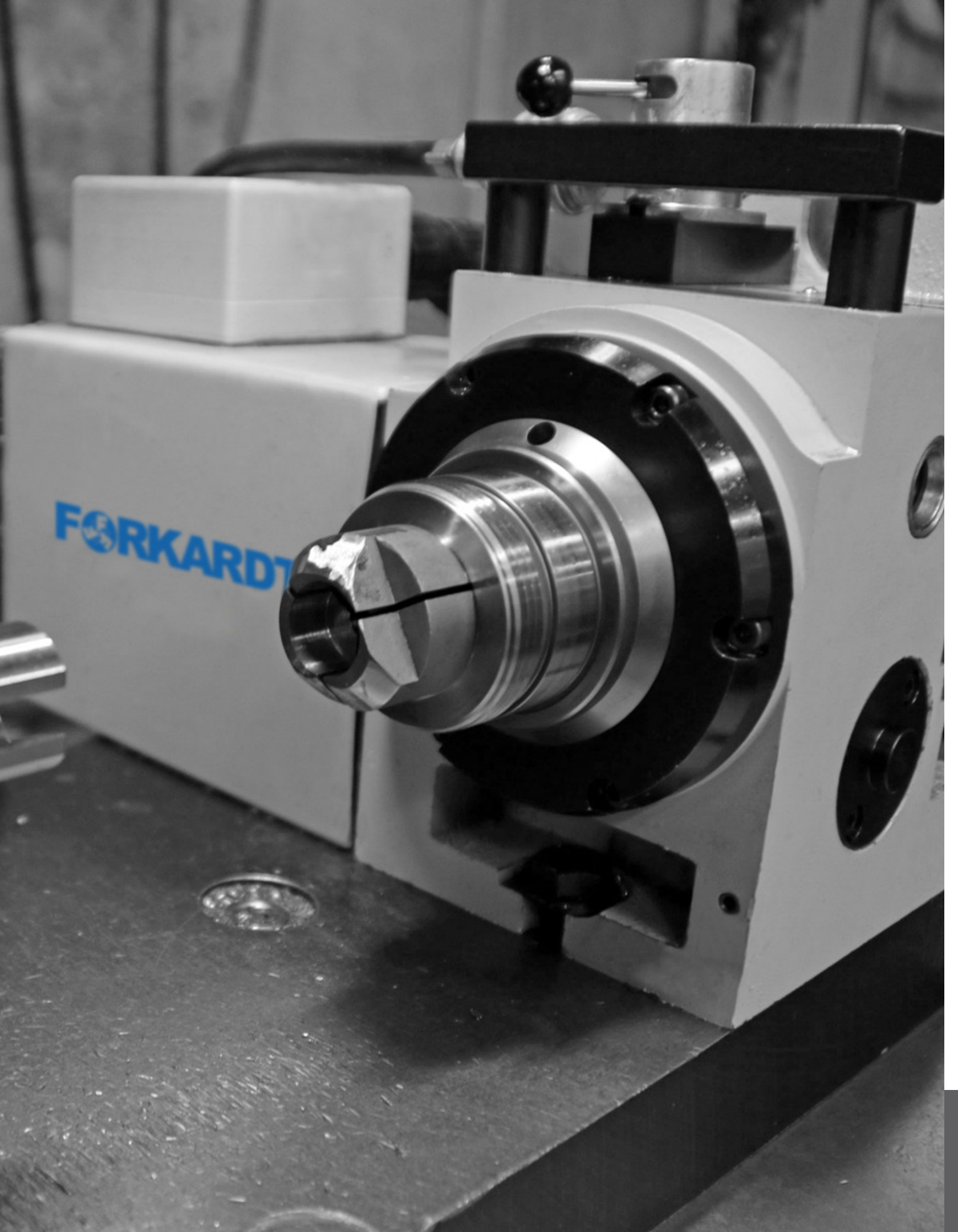
Precision CNC
Tooling for Mills

Collet Blocks

Tool Holders,
Toolholder Collets
and Bushings

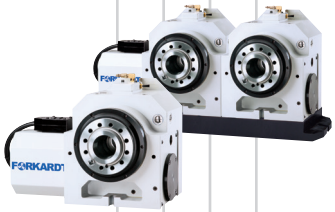
WORKHOLDING


4980J
HARDINGE
#2014


FORKARDT

ROTARY

5C2 Gear-driven
Rotary Indexers
- GD5C2 Single
- GD5C2-02 Dual
- GD5C2-03 Triple
- GD5C2-04 Quad



16C2 and 3J2
Gear-driven
Rotary Indexers
- GD16C2 and GD3J2 Single
- GD16C2 and GD3J2 Dual
- GD16C2 and GD3J2 Triple

160 and 210mm
Low-profile Rotary Tables
- GD160LP
- GD210LP

Tilting, Dual-axis Rotary Indexers
- LPX5C2-01 Single
  - LPX5C2-02 Dual
  - LPX5C2-03 Triple
- LPX5C2-04 Quad
- GDX5C2 Single

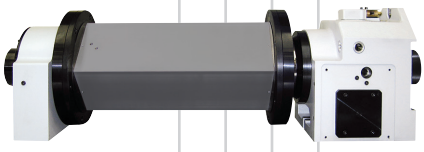


Plate and Cube Trunnions
- PT5C2, 5C Plate
- PTA25, A2-5 Plate
- CTA25, A2-5 Cube

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Hardinge 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.

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