

GRINDING



JONES & SHIPMAN SUPREMA

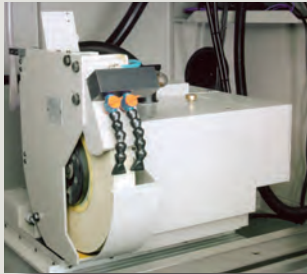
Touchscreen controlled,
cylindrical grinder range



www.jonesshipman.com
www.kellenberger.com

JONES & SHIPMAN
A KELLENBERGER COMPANY

Toolroom, batch or high volume production cylindrical grinding machines SUPREMA



Wheelhead options, robust construction & innovative design

Wheelheads

- Robust plain straight approach, external only, wheelhead. Wheels up to 450 x 50 mm and a programmable constant peripheral wheel speed option
- Swivelling universal wheelhead, provided as standard with air cushion and pneumatic clamping. Equipped with left & right hand wheels and a belt driven internal grinding system ready to accept an optional internal spindle
- All wheels are provided with retractable wheel guards

Workhead and tailstocks

- Air purged live & dead centre swivel base workhead, with high precision taper roller bearings for superior stiffness and a synchronous belt variable speed drive that allows programmed speed (rpm) or constant surface speed (m/sec.) of the workpiece
- Robust lever operated plain bearing tailstock is provided as standard, with a high accuracy taper correction tailstock available as an option

Main machine castings

- Generously proportioned, high quality cast iron, bed, underslide, backslide and table, each casting designed to provide excellent rigidity

Slideways

- Bed/underslide is a Vee & Flat configuration, the wheelhead backslide operates on twin Vee ways
- All slideways are hand scraped, with one surface Turcite® coated, all have automatic lubrication

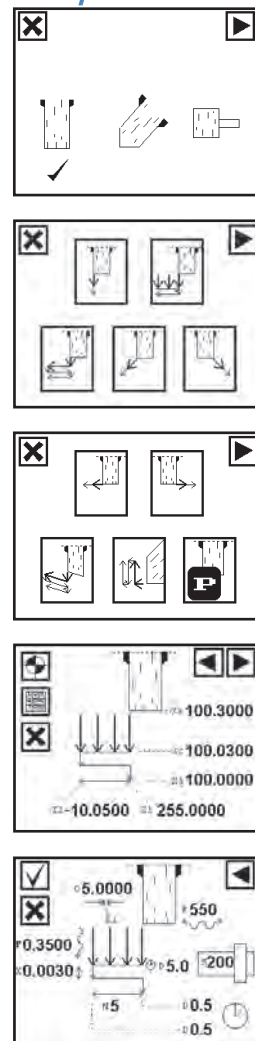
Axes

- Both axes are controlled & positioned by Fanuc® Digital AC servo motors

Affordable & sophisticated cylindrical grinding with simple set-ups

- Developed to offer to the operator the advantages of CNC control without the complexity of traditional CNC systems
- Jones & Shipman easy-to-use icon based software with Fanuc® touchscreen control can interpolate two axes simultaneously to enable precision grinding of complex shapes, angles and diameters
- Easy manual, semi or fully automatic operation.
- 'Self Teach' software enables inexperienced & experienced operators alike to be immediately more productive
- The operator is offered three modes of operation; Manual, Dress or Grind by simple single membrane button selection
- All controls are immediately to hand for setting and manual operation when required
- Quick set automatic dressing and grinding cycles enable unmanned operation
- Dress on demand with full compensation

Grind cycle screens



'Self Teach' Easy Touchscreen control



Standard features

- Manual, semi or automatic operation
- Manual traverse or plunge grind for 1 off's
- Up to 20 linked cycles in auto mode
- Manual or auto wheel dressing
- In or out of cycle dressing with full compensation
- Dress on demand
- Straight dress, left hand face dressing
- Auto cycles:- Plunge, Traverse, Face grinding with L/H side of wheel, Plunge & shoulder (L/H only), Multi plunge & traverse grind
- Regrind
- Simple trimming

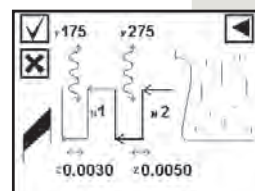
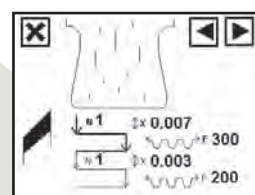
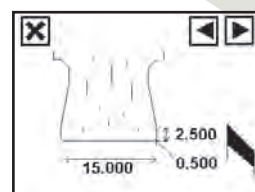
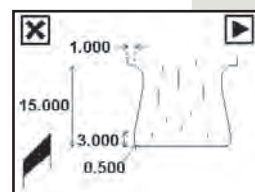
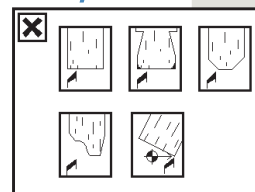
Advance software suite extra features

- Straight dress left or right hand facing wheels
- Fully compensated easy form dressing of complex profiles & Vee forms without additional form dressing attachments
- Extra auto cycles:- Thread grinding, Peel grinding, Taper traverse grinding, Contour grinding, etc
- Easy download/upload to & from PDA, PC or Network of CAD/CAM programs for complex wheel profiles and part program storage
- Includes Heidenhain® Absolute 50 nanometer linear scale upgrade to X & Z axes

Optional equipment

- Gauging options including:- Shoulder, Diameter & Gap Elimination
- Head mounted shoulder probe or Table mounted gauging systems
- Taper correction Tailstock
- Auto & semi auto wheel balancing
- Standard & variable speed Internal grinding spindles
- 3 & 4 jaw Chucks, Magnetic Chucks, Collets and Steady rests
- Coolant and Mist extraction units
- CAD/CAM package for producing complex wheel profile programs

Dress cycle screens



Specification

Model

Control system

650U/E

1000U/E
Fanuc® Touchscreen

1500U/E

Capacities

Grinding length

650 mm

1000 mm

1500 mm

Centre height/grinding diameter

160 mm / 300 mm

Weight between centres

100 kg

Table

Traverse distance

750 mm

1145 mm

1645 mm

Traverse speed, stepless, per minute

0,0001 mm - 12 m

Table swivel - clockwise/anticlockwise

+9° / -9°

+8,2° / -8,2°

+5° / -5°

Electronic handwheel increment

0,001 / 0,010 / 0,100 mm

Traverse Control

Fanuc® digital AC servo motor*

Wheelslide

Total infeed

260 mm

Infeed rate per minute

0,0001 mm - 6 mm

Electronic handwheel increment

0,001 / 0,010 / 0,100 mm

Infeed Control

Fanuc® digital AC servo motor*

Wheelhead

Type

Swivelling

Fixed external

Main motor

4.2 kW

7,5 kW

Wheel speed

33 ms

45 ms

Left hand wheel (Ø x width x bore)

350 x 50 x 127 mm

450 x 50 x 203,2 mm

Right hand wheel (Ø x width x bore)

300 x 25 x 127 mm

N / A

Internal grinding system - spindle optional

Belt Driven

N / A

Internal grinding system motor power

2,2 kW

N / A

Internal grinding spindle option

High speed self driven

N / A

Workhead

Type

Live & dead centre

Swivel range

-15° / +90°

Speed range

0 - 660 r.p.m.

Output torque

27 Nm

Spindle taper

5 / 3 MT

Data transfer protocol

RS 232 + Easy comm

Dimensions

Machine weight, (approx.)

5440 kg

6220 kg

7450 kg

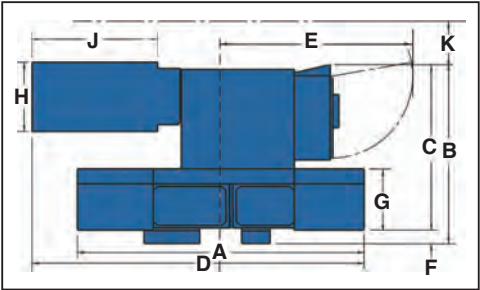
Shipping dimensions

18,22 m³

24 m³

28 m³

* Optional Heidenhain® 'Absolute' linear scale upgrade



650 Model 1000 Model 1500 Model

A - 3405 mm	4440 mm	5695 mm
B - 2117 mm	2117 mm	2117 mm
C - 1957 mm	1957 mm	1957 mm
D - 3945 mm	4440 mm	5083 mm
E - 2280 mm	2280 mm	2280 mm
F - 160 mm	160 mm	160 mm
G - 725 mm	725 mm	725 mm
H - 820 mm	820 mm	820 mm
J - 1490 mm	1490 mm	1490 mm
K - 800 mm	800 mm	800 mm

All specifications and designs are subject to alterations without notice.

Jones & Shipman also offer Large Capacity Surface Grinders, Creepfeed Grinders and Cylindrical Grinders for Toolroom and Production applications.
We also offer J&S Remanufactured and Used Grinders plus a full Spares & Service facility



Through our Group Companies and an established network of distribution Jones & Shipman guarantee competent advice and support in evaluating, purchasing and using high-quality cylindrical, surface and creepfeed grinding systems.

Sales and service:

Jones & Shipman Grinding Limited

Murrayfield Road, Leicester

LE3 1UW, England

Tel: +44 (0) 116 201 3000

Fax: +44 (0) 116 201 3002

www.jonesshipman.com

info@jonesshipman.com

Jones & Shipman S.A.R.L.

Zone Activillage,

8 allée des Ginkgos, B.P. 112,

69672 BRON Cedex, France

Tel: +33 (0) 4 72 81 26 60

Fax: +33 (0) 4 72 81 26 69

www.jonesshipman.com

info@jonesshipman.com

L. Kellenberger & Co.AG

Heiligkreuzstrasse 28

9009 St.Gallen / Switzerland

Tel: +41 (0) 71 242 91 11

Fax: +41 (0) 71 242 92 22

www.kellenberger.com

info@kellenberger.net

L. Kellenberger & Co.AG

Längfeldweg 107

2500 Biel-Bienne 8 / Switzerland

Tel: +41 (0) 32 344 11 52

Fax: +41 (0) 32 341 13 93

www.kellenberger.com

Sales and service for China:

Hardinge China Ltd.

No.1388 Kangqiao Rd (East),

Shanghai, China 201319

Tel: +86 21 38108686

Fax: +86 21 38108681

Service:

Tel: +86 21 38108689

Sales:

Tel: +86 21 38108686 ext 8403

www.hardinge.com.cn

Sales and service in USA & Canada:

Hardinge Inc.

One Hardinge Drive

P.O. Box 1507

Elmira, New York 14902-1507 USA

Tel: +1 (607) 734 2281

Fax: +1 (607) 735 0570

www.hardinge.com

www.kellenberger.com

info@kellenberger.com

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