

GRINDING



JONES & SHIPMAN PROGRIND EASY
Touchscreen Controlled
High Precision, High Productivity, Surface Grinders



www.jonesshipman.com
www.kellenberger.com

 **JONES & SHIPMAN**
A KELLENBERGER COMPANY

Heavy duty, high precision, surface grinding machines PROGRIND 1045 & 1267



Rigid construction and innovative design

Main machine castings

- Generously proportioned, high quality cast iron, bed, column, crosshead & table
- Each casting is designed to form an ultra rigid machine structure

Slideways

- The wheelhead moves in X & Y directions on adjustable gib slideways
- All slideways are hand scraped and have a patented lubrication system
- Hydraulic or ballscrew driven table options

Wheelhead

- Direct drive assembly with hardened & precision ground wheelspindle rotating in precision angular contact, rolling element bearings lubricated for life

Machine guarding

- Fully interlocked enclosed table guarding is supplied as standard

Axes

- All ballscrew axes controlled and positioned by Fanuc® digital AC servo motors with Heidenhain® Absolute linear nano scale feedback
- The hydraulic table axis is powered from a heavy duty modular power pack

Accuracy

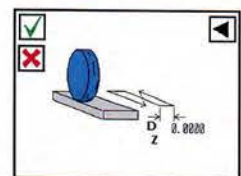
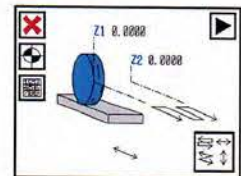
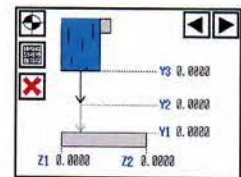
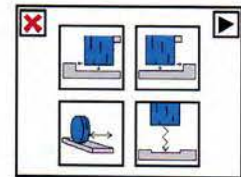
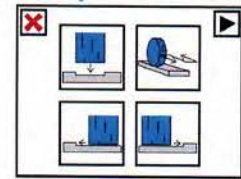
- Straightness 1000 mm : 0.002 mm or even less
- Flatness 1000 x 1000 mm : 0.004 mm or even less
- Parallelism 1000 x 1000 mm : 0.005 mm or even less



Affordable & sophisticated surface grinding with simple set-ups

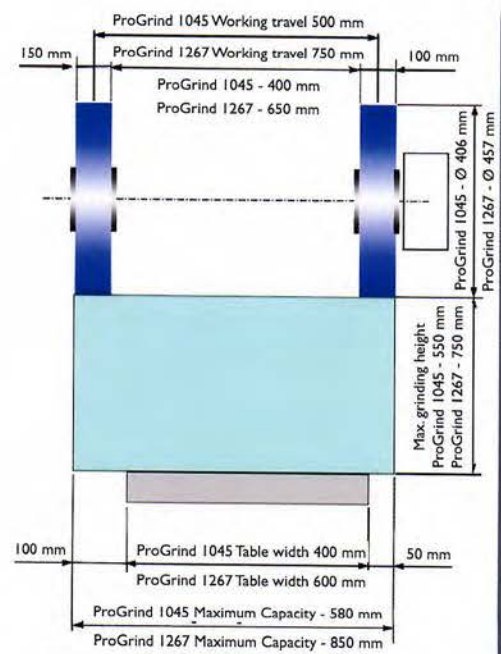
- Specifically designed to offer unrivalled ease-of-use coupled to the highest levels of productivity
- Easy manual, semi or fully automatic operation
- 'Self Teach' software, now with new colour graphics, enables inexperienced and experienced operators alike to be immediately more productive
- Quick set automatic dressing and grinding cycles enable unmanned operation
- Straight, facing, slotting or Vee form wheel macros
- Easy form dressing of complex profiles
- No optional complex dressing devices required
- Ability to use CBN and Diamond wheels
- Plunge, area, face, multi-plunge, multi-slot, multi-plunge and area grind macros
- Easy down load/up load to USB memory stick

Grind cycle screens



Easy & rapid set-up for automatic grind cycles

- At start-up the operator is offered three simple options: Manual, Dress or Grind cycle mode
- In Manual Mode the Easy operates as a simple hand controlled machine, with manual dress and no setup procedures. Work speeds and feeds are adjustable via the touchscreen
- Dress Mode offers five standard wheel shape options, Flat, Slot, Facing, Vee form and Full ISO with one or two diamonds as needed
- Grind Cycle mode allows from 1 only, or up to 20 Grind Cycles, as the complexity of component dictates

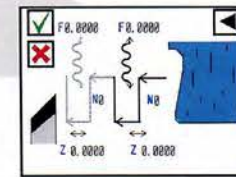
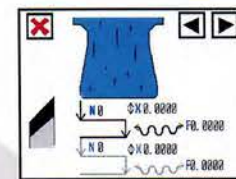
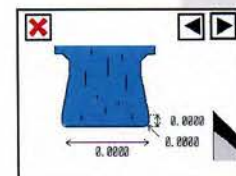
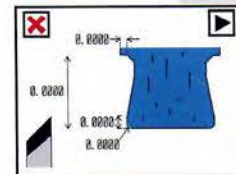


Easy Touchscreen control



- Developed to offer to the operator the advantage 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 surfaces
- The operator is offered three modes of operation; Manual, Dress or Grind by single membrane button selection adjacent to the 'Touchscreen'
- This extremely simple system guides the operator and allows him to digitise positions and create programs without any computer knowledge

Dress cycle screens



Automatic Compensated Dressing On Demand, In or Out of Cycle

- Straight or Formed wheel dressing can be called up at the touch of a button at any time in either Manual, Single cycle or Multi cycle mode with the 'Dress on Demand' feature
- In a Grind cycle mode, the wheel will then return and continue from its last position
- In addition, dressing can be selected to take place before and/or during the grind cycle via the 'In or Out of cycle' dressing feature
- Compensation for dressing increments and diamond radii is automatic with all the above features



Specifications

General capacities

Max. grinding length x width (with standard wheel)
 Max. grinding length x width (with 100 mm wide wheel, see Grinding Capacities chart inside)
 Distance between table & grinding wheel (new wheel)
 Maximum table load (excluding chuck)

Wheelhead (Direct Drive)

Vertical movement (max)
 Size of grinding wheel: Standard
 Size of grinding wheel: Optional
 Speed of grinding wheel – 50 Hz motor
 Speed of grinding wheel – 60 Hz motor
 Wheelhead motor

Table

Working surface
 With standard chuck
 Traverse, max. hand / hydraulic
 Traverse speed range (per minute)
 Width of tenon slots
 Distance from floor to table

Crossfeed

Total cross traverse
 Feed per graduation of electronic handwheel
 Automatic feed, least programmable increment
 Automatic feed rate (per minute)
 Rapid feed rate
 Sparkout under wheel
 Crossfeed control
 Feedback (Linear scale)

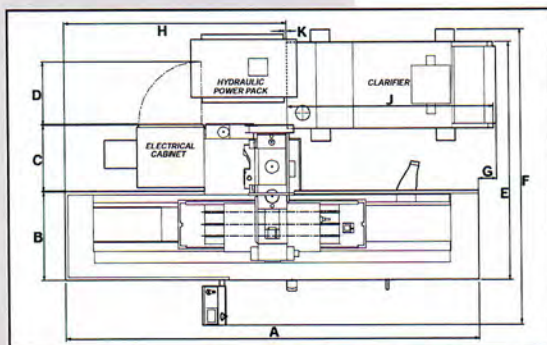
Wheelfeed

Feed per graduation of electronic handwheel
 Automatic feed, least programmable increment
 Rapid feed rate
 Downfeed control
 Feedback (Linear scale)

Data Transfer Protocol

Dimensions

Weight (approx.)
 Shipping dimensions (approx.)



All specifications and designs are subject to alterations without notice.

1045Easy

1000 x 500 mm
 1000 x 580 mm
 550 mm
 1200 kg

600 mm
 406 x 80 x 152,4 mm bore
 406 x 100 x 152,4 mm bore
 1400 rpm
 1680 rpm
 11 kW

1000 x 400 mm
 1000 x 500 mm
 1340 / 1220 mm
 1 – 25 m
 3 x 14,4 mm
 1030 mm

530 mm
 0,001 / 0,010 / 0,100 mm
 0,0001 mm
 0,0001 - 3000 mm
 3000 mm
 0 – 99
 Fanuc® Digital AC servo
 Heidenhain® 'Absolute' scale

0,001 / 0,010 / 0,100 mm
 0,0001 mm
 3000 mm
 Fanuc® Digital AC servo
 Heidenhain® 'Absolute' scale

USB memory stick

6700 kg
 20 m³

Base plan	1045	1267
A -	4300 mm	6202 mm
B -	920 mm	1152 mm
C -	688 mm	780 mm
D -	652 mm	1200 mm
E -	2455 mm	3280 mm
F -	3063 mm	3737 mm
G -	190 mm	315 mm
H -	2345 mm	4067 mm
J -	2145 mm	2450 mm
K -	100 mm	100 mm
Machine Height	2840 mm	3255 mm

1267Easy

1200 x 600 mm
 1200 x 850 mm
 735 mm
 1696 kg

800 mm
 457 x 100 x 203,2 mm bore
 Options to suit application
 1400 rpm
 1680 rpm
 22 kW

1200 x 600 mm
 1200 x 600 mm
 1610 / 1420 mm
 1 – 18 m
 3 x 14,4 mm
 1030 mm

750 mm
 0,001 / 0,010 / 0,100 mm
 0,0001 mm
 0,0001 - 3000 mm
 3000 mm
 0 – 99
 Fanuc® Digital AC servo
 Heidenhain® 'Absolute' scale

0,001 / 0,010 / 0,100 mm
 0,0001 mm
 3000 mm
 Fanuc® Digital AC servo
 Heidenhain® 'Absolute' scale

USB memory stick

11800 kg
 39 m³

Jones & Shipman also offer Smaller Capacity Surface Grinders, Creepfeed Grinders and Cylindrical Grinders for Toolroom and Production applications.

World-wide sales and service

05.2014



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 Hardinge 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
9008 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 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

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

Usach Technologies Inc..

1524 Davis Road
Elgin, IL 60123 USA
Tel: +1 (847) 888 0148
Fax: +1 (847) 888 0144
www.usach.com
info@usach.com

Your nearest Jones & Shipman Partner:



Certificate No.
FS 562751 ISO 9001: 2008