

GRINDING



JONES & SHIPMAN

SUPREMA

Touchscreen controlled

Cylindrical grinder



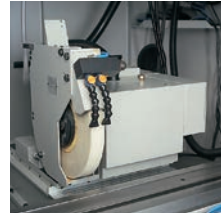
[www.jonesshipman.com](http://www.jonesshipman.com)



**JONES & SHIPMAN HARDINGE**  
A KELLENBERGER COMPANY

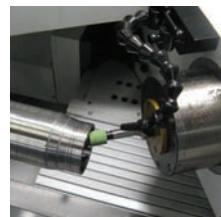


# SUPREMA OD ID grinding machines



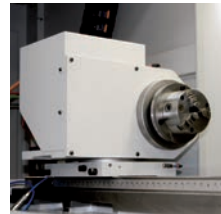
### Wheelheads

- Robust Plain straight approach, external only, wheelhead. Wheels up to 450 x 80 mm with constant peripheral speed
- 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
- Both "Belt Driven" (standard) and "Self Driven" (option) Internal grinding wheel systems available
- Wheels are provided with retractable wheel guards



### Workhead and Tailstocks

- Air purged live and 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 high accuracy taper correction tailstock, provided as standard



### Main machine castings

- Generously proportioned high quality cast iron bed, underslide, backslide and table, each casting designed to provide excellent rigidity
- All slideways are hand scraped with one surface Turcite® coated, all have automatic lubrication



### Axes

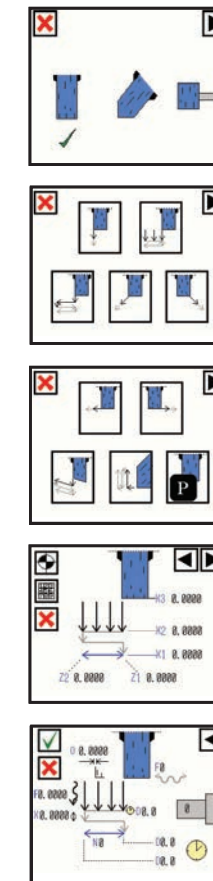
- Both axes are controlled & positioned by Fanuc® Digital AC servo motors.



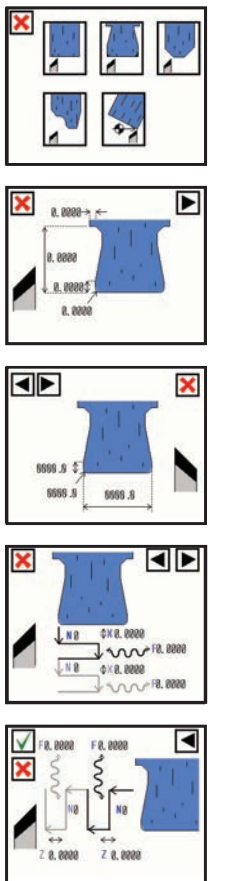
### Jones & Shipman easy-to-use icon based software

with Fanuc® colour touchscreen control, can interpolate two axes simultaneously, to enable precision grinding of complex shapes, angles & diameters. Extra grind/dress cycles including Regrind, Profile & CAD/CAM are available with our Advanced Software Suite

#### Grind Cycle Screens



#### Dress Cycle Screens



### 'Self Teach' Easy Touchscreen control

Developed to offer to the operator the advantage of CNC control without the complexity of traditional CNC systems. At start-up three simple mode options are offered: Manual, Dress or Grind Cycle. Dress mode offers five standard wheel shape options - Straight, 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 the component dictates.



# Specification

Model	650U/E	1000U/E	1500U/E
Control system	Fanuc® PowerMotion® with Colour Touchscreen		
<b>Capacities</b>			
Grinding length	650 mm	1000 mm	1500 mm
Centre height / grinding diameter		160 mm / 300 mm	
Weight between centres		100 kg	
<b>Table</b>			
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 & feedback		Fanuc® digital AC servo motor*	
<b>Wheelslide</b>			
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 & feedback		Fanuc® digital AC servo motor*	
<b>Wheelhead</b>			
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) max.	400 x 50 x 127 mm		450 x 80 x 203,2 mm
Right hand wheel (Ø x width x bore) max.	350 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 options	Belt or Self Driven		N / A
<b>Workhead</b>			
Type		Live & dead centre	
Swivel range		-15° / +90°	
Speed range		0 - 660 r.p.m.	
Output torque		27 Nm	
Spindle taper		5 / 3 MT	
<b>Data transfer protocol</b>		USB	
<b>Dimensions</b>			
Machine weight, (approx.)	5440 kg	6220 kg	7450 kg
Shipping dimensions	18,22 m <sup>3</sup>	24 m <sup>3</sup>	28 m <sup>3</sup>

\*Optional Heidenhain® 'Absolute' 50 nanometer linear scale upgrade

## Sales and Service

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