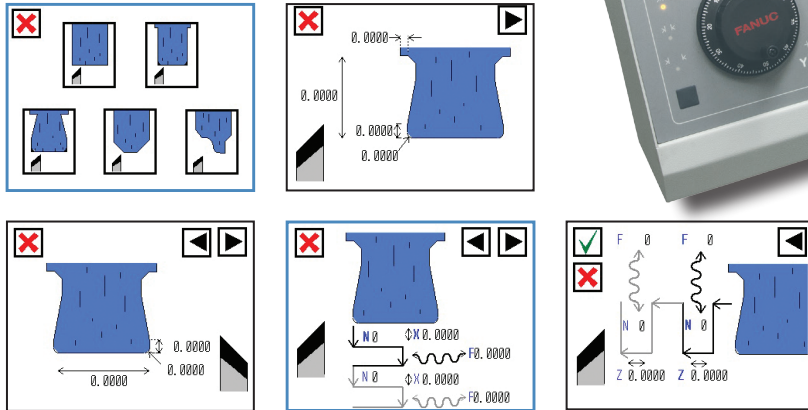


Jones & Shipman 'Easy' Surface Grinder Control System

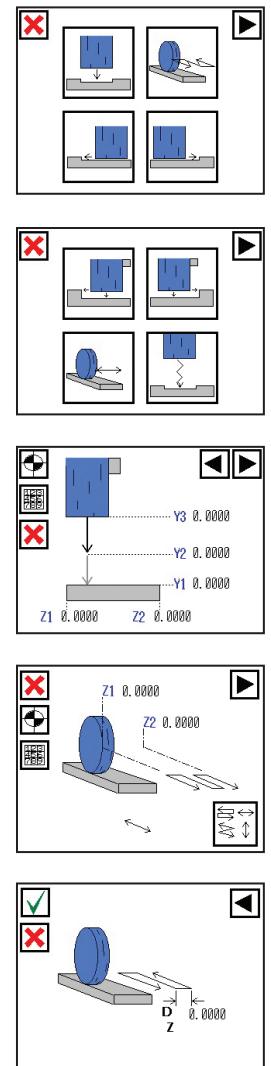
524/624 Easy Models



Dress Cycle screens



Grind Cycle screens



Affordable & sophisticated Surface grinding with simple set-ups

- Offers the operator the advantages of CNC control without the complexity of traditional CNC systems.
- Jones & Shipman easy-to-use icon based software with colour Touchscreen control can interpolate two axes simultaneously to enable precision grinding of complex shapes and angles.
- Easy manual, semi or fully automatic operation.
- 'Self Teach' software enables inexperienced and experienced operators to be immediately more productive.
- All controls are immediately to hand for setting and manual operation when required.
- Quick set automatic dressing and grinding cycles enable unmanned operation.
- Ability to use CBN and Diamond wheels.

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. 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 the component dictates.

Standard Features

- Manual, Semi or Fully automatic operation.
- Full Colour Touchscreen control
- Programmable up to 20 individual or linked grinding / dressing cycles.
- Digitize datum position for "Y" axis allowing actual ground size to be entered.
- Trim facility for "Y" and "Z" axis, Global trim, zero size positions for grinding cycles.
- Trim facility for "Y" and "Z" axis, for each individual grinding cycle.
- Feed rate override (percent)
- Table Speed control \pm with table jog.
- Regrind.
- Cycle Interrupt edit and recovery.
- Programmable diamond radii.
- Programmable diamond increment and feed rate for periphery of grinding wheel.

- Full compensation for all wheel dressing functions.
- Trim facility for diamond positions & radii.
- In or Out of cycle dressing.
- Dress on Demand.

Advanced software suite extra features

- Fully compensated easy form dressing of complex profiles & Vee forms without additional form dressing attachments.
- Extra auto cycles:- Contour, Face, Plunge and Face grinding.
- Easy download/upload to and from USB memory stick for part program storage.
- Easy download from USB memory stick of CAD/CAM programs for complex wheel profiles.
- Includes Heidenhain® 'Absolute' 50 nanometer linear scale upgrade to Y & Z axes.

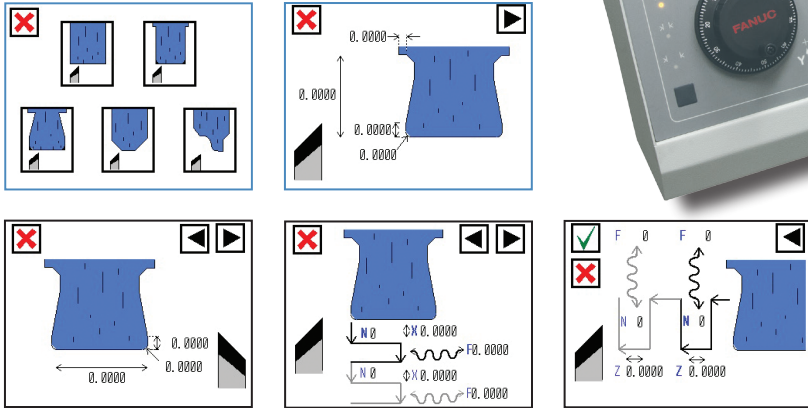
(Advanced software suite is standard with 524/624 Easy models)

Jones & Shipman 'Easy' Surface Grinder Control System

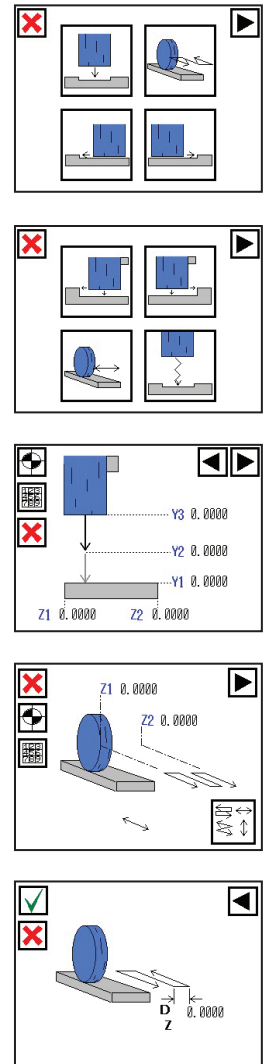
TechMaster & ProGrind Models



Dress Cycle screens



Grind Cycle screens



Affordable & sophisticated surface grinding with simple set-ups

- Offers the operator the advantages of CNC control without the complexity of traditional CNC systems.
- Jones & Shipman easy-to-use icon based software with full colour Touchscreen control can interpolate two axes simultaneously to enable precision grinding of complex shapes and angles.
- Easy manual, semi or fully automatic operation.
- 'Self Teach' software enables inexperienced & experienced operators to be immediately more productive.
- All controls are immediately to hand for setting and manual operation when required.
- Quick set automatic dressing & grinding cycles enable unmanned operation.
- Ability to use CBN and Diamond wheels.

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. 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 the component dictates.

Standard Features

- Manual, Semi automatic or Fully automatic operation.
- Full Colour Touchscreen control.
- Programmable up to 20 individual or linked grinding / dressing cycles.
- Digitise datum position for "Y" axis allowing actual ground size to be entered.
- Trim facility for "Y" & "Z" axis, Global trim, zero size positions for grinding cycles.
- Trim facility for "Y" & "Z" axis, for each individual grinding cycle.
- Feed rate override (percent)
- Table Speed control \pm with table jog.
- Regrind.
- Cycle Interrupt, edit and recovery.
- Programmable diamond radii.
- Programmable diamond increment & feed rate for periphery of grinding wheel.
- Full compensation for all wheel dressing functions.
- Trim facility for diamond positions & radii.
- In or Out of cycle dressing.
- Dress on Demand

Standard Programmable grinding / dressing cycles

- Area Grind / Multi Plunge and Area grind cycle.
- Slot / Plunge grind cycle.
- Peripheral Straight wheel dress.
- Grind cycles including coarse & fine feeds at table or saddle reversal with sparkout.
- Grinding cycles can be performed individually or linked to form multi grind cycles enabling more than one feature to be ground in one loading.
- Digitise datum position for "Z" axis allowing zero position or drawing dimension to be entered.
- Automatic Dressing in grinding cycle, none dressable wheels can also be used.

Optional Hardware / Software

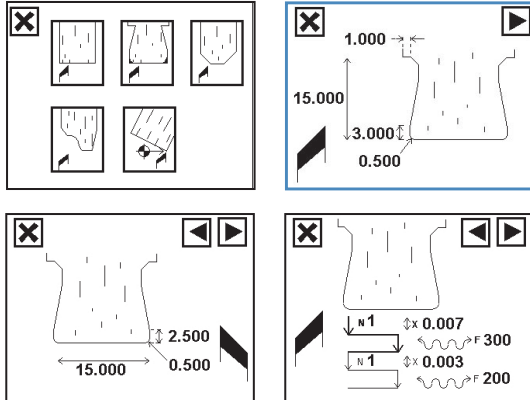
- "Z" axis scale.
- Face Grind (Front or Rear wheel face) cycle.
- Slotting wheel dress, Facing wheel dress & "V" Form wheel dress.
- Non standard wheel form dressing toolpath loaded via USB memory stick, LH & RH diamonds independently programmable.
- New or Preformed wheel selection to permit use of previously formed grinding wheels.
- Programmable diamond increment & feed rate for periphery & side faces of grinding wheel.
- Simple download / upload via USB memory stick to store / load programs.

Jones & Shipman 'Easy' Cylindrical Grinder Control System

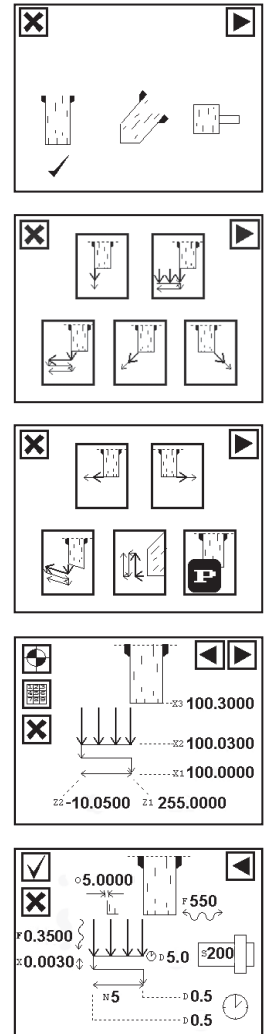
Suprema & Ultramat Models



Dress Cycle screens



Grind Cycle screens



Affordable & sophisticated cylindrical grinding with simple set-ups

- Offers the operator the advantages of CNC control without the complexity of traditional CNC systems.
- Jones & Shipman easy-to-use icon based software with 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 to be immediately more productive.
- All controls are immediately to hand for setting and manual operation when required.
- Quick set automatic dressing & grinding cycles enable unmanned operation.
- Ability to use CBN and Diamond wheels.

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, 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.

Standard Features

- Manual, semi or automatic operation.
- Touchscreen control.
- Manual traverse or plunge grind for one (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.

Advanced software suite extra features

- Straight dress left or right 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.

(Advanced software suite is standard with Ultramat Easy models)