

### BEAR – BEAR Series



The **RJH BEAR Toolgrinder** is a unique machine designed specifically to assist the technician servicing the school or college workshop. The Bear saves time for the technician and eliminates manual grinding variability. It complies with the European Machinery Directive and with the BS 4163:2007 “Health and Safety for Design and Technology in schools and similar establishments” regulations. All RJH education machines carry a 24 month warranty and are supplied with an operating manual.

#### KEY FEATURES

- Produces an accurate angle on the tool, which can be pre-set and repeated for a full batch of tools
- Controlled 140rpm wheel speed
- Force-fed recirculatory coolant system with anti-spill tray
- Integral oil reservoir with filter (5 litres of oil is supplied)
- Tool holder for chisels and plane blades up to 60mm wide.
- Radius gouge tool holder (BEAR2 only)
- 1500rpm cone wheel with work rest and splash guard (BEAR2 only)
- Centre swivel arm with vernier adjustment to ensure square and even contact between the tool and the wheel
- Base cabinet with lockable access door
- Supplied with 406mm diameter x 32mm wide grinding wheel

#### SAFETY FEATURES

- No-volt overload push-button starter
- Automatic safety cut-out when the front door is opened

#### OPTIONAL REFINEMENTS

- Flexible halogen floodlight with transformer\*
- Lockable triple pole isolator\*
- Grinding wheel dresser arm with dresser block
- Wheel dresser block
- Mortice chisel sharpening attachment
- Foot stop\*

\* Please note that these items are factory fitted at the point of manufacture



Tool holder in Grinding Position



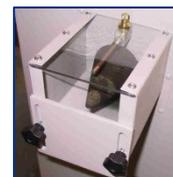
Gouge Tool holder in Inspection Position



Optional Foot Stop



Electric Controls

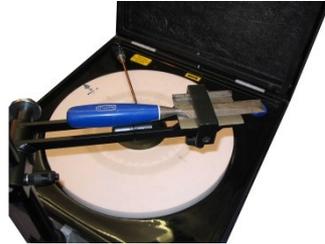


Cone Wheel (BEAR2)



Oil Drip

### Process:



**Chisel Sharpening:** The tool is inserted in the swivel arm with the chamfer/blade side down and flat against the grinding wheel. The required grinding angle can be set using the scale to ensure an accurate and consistent result across a batch of tools. The operator then sets the cutting oil flow rate using the control valve; by ensuring that the grinding wheel is adequately lubricated a better finish can be achieved on the tool edge. The chisel or plane blade is then moved inwards and outwards across the rotating grinding wheel (i.e. from the outside edge of the wheel into the centre and back again) in the opposite direction to the rotation of the wheel itself. The finish is then checked and the process repeated as required.



**Gouge Sharpening - external edge:** This process is similar to that followed for chisel sharpening, except that a radius gouge attachment is used (see BEAR 2 specification overleaf). In addition to moving the tool across the wheel as outlined above, the top handle on the attachment can be used to rock the gouge backwards and forwards throughout the grinding process. This grinds a radius round the full edge of the gouge.



#### Gouge Sharpening - internal edge:

The cone wheel can be used to remove any burrs formed on the inner face of the gouge after it has been sharpened. Once the work rest has been adjusted to the required position, and the cutting oil flow rate set, the inner face of the gouge is placed onto the rotating cone until the burrs have been removed.



#### Oil Reservoir in pedestal door -

The Bear has a recirculatory cooling oil system. Lubricating with oil throughout the grinding process achieves a smoother, more even finish.

### Specification & Dimensions:

MODEL	BEAR 1 & BEAR 2	BEAR 1S & BEAR 2S
Motor	0.18kw	0.25kw
Electrical Supply	400V/3ph/50Hz	230V/1ph/50Hz
Grinding Wheel Size, dia x width	406mm x 32mm	
Wheel Type	Aluminium Oxide A80	
Cone Wheel Size, dia x length	75mm x 100mm	
Weight	Bear 1 = 105kg, Bear 2 = 115kg	

