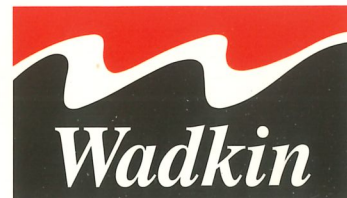
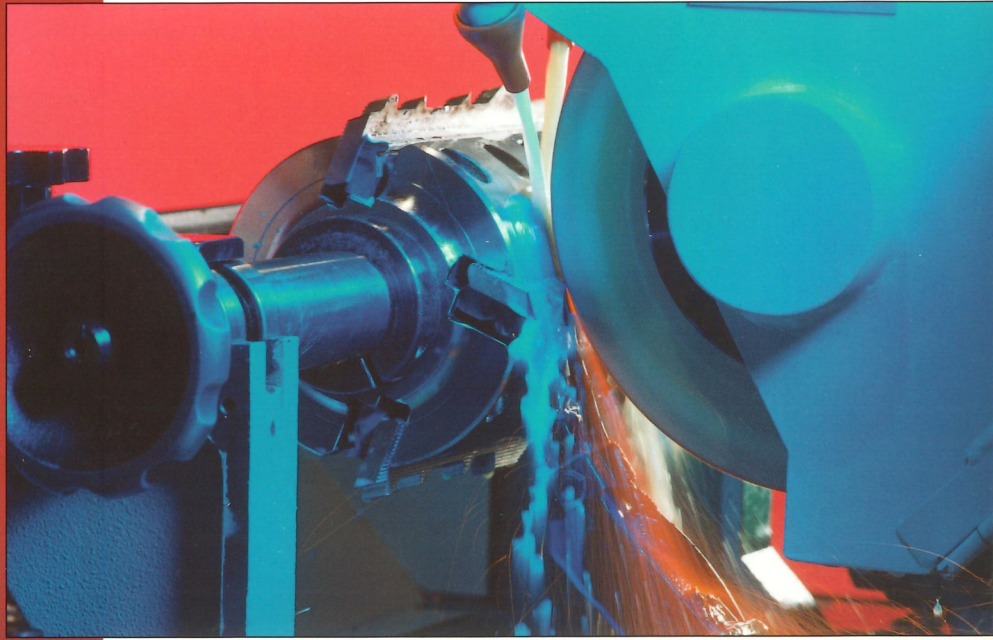


TOOLROOM EQUIPMENT

A range of
Grinding
Machines



Silhouette & Visage Profile Grinding Centres

Wadkin is a world leader in the design and manufacture of high quality woodworking machinery and toolroom equipment. For the toolroom, Wadkin offers a comprehensive range of grinders and setting systems that fully meet the needs of the industry.

All machines are designed and built to the highest quality standards and incorporate the most up-to-date technical features. They are produced at Wadkin's extensive manufacturing facilities using the latest CAD CAM design techniques and automated machining centres.

Wadkin is truly international with operations in the United Kingdom, Australia, North America and the Far East. The company is accredited with BS5750 (ISO 9001) certification and all machines are built to meet the latest international standards.

The Silhouette and Visage grinders combine innovations in grinding technology with supreme accuracy to create a simple to use and highly productive range of machines.

Central to the design of the Silhouette is a twin grinding head which enables extremely fast changes from profile to straight knife grinding or solid profile cutter resharpening.

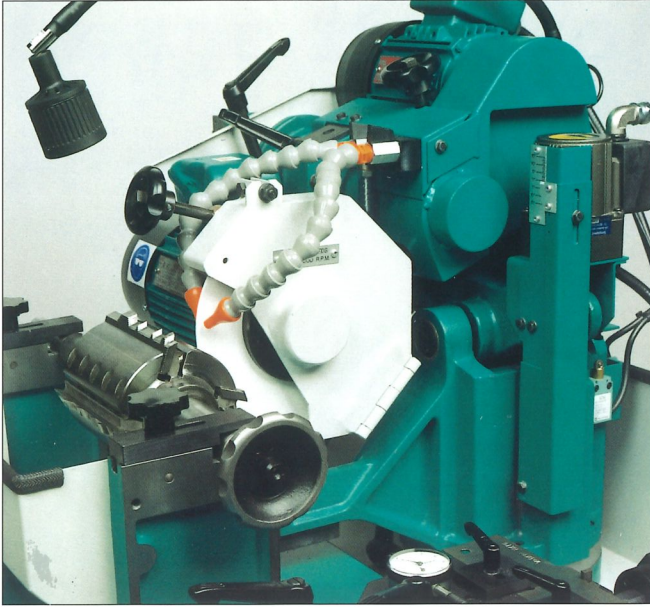
The Visage offers a single head machine with all the other features of the Silhouette. Both machines have a full 300mm x 350mm grinding capacity and achieve the same high levels of accuracy to be found on fully automatic machines.

Stylus and template set-up is quick and easy on both machines. A unique turret holder accepts up to six styli for a variety of work. The template slide permits quick coarse adjustment with fine adjustment of template location achieved by dial indicators. Positive location of templates is made by traditional methods or by a single clamping system.

Ergonomic design makes both machines operator friendly. Adjustable arm rests and all controls including the coolant tank are easily accessible from the front of the machine.

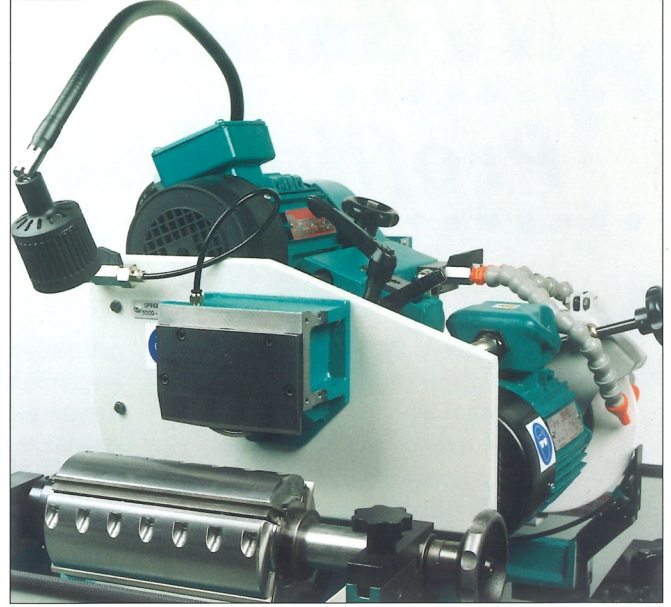


The Silhouette Grinding Centre



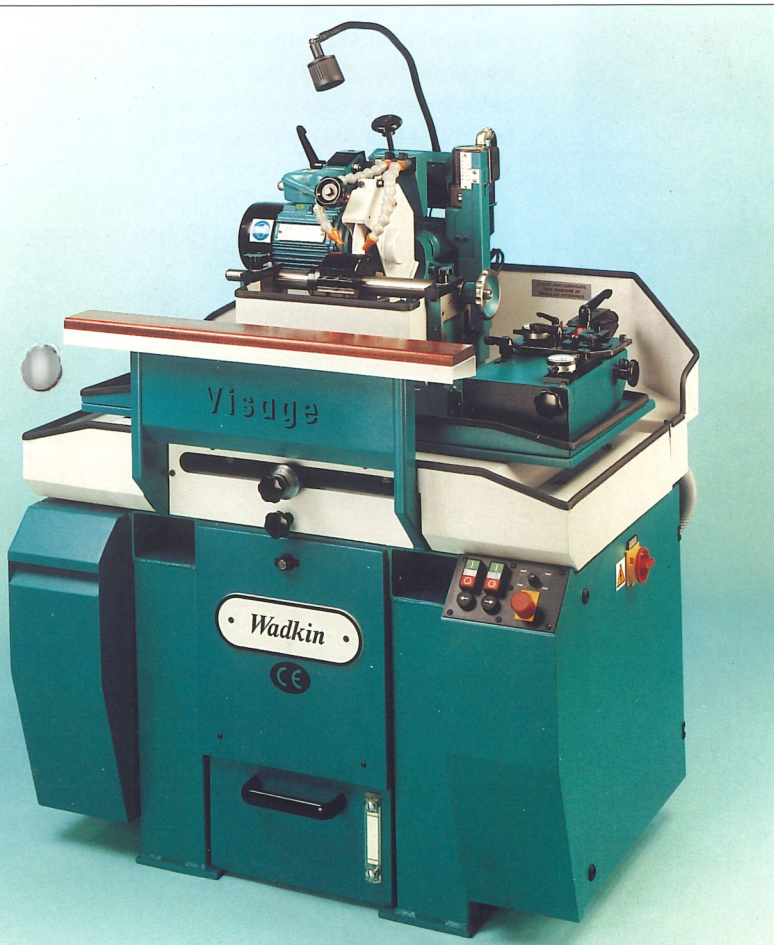
① Profile Grinding

① The Silhouette in the profile grinding position. Electronically controlled variable spindle speeds are standard to ensure optimum finish and performance.

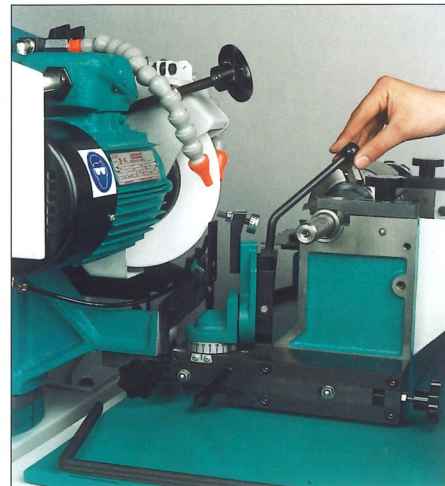


② Straight Knife Grinding (Silhouette only)

② By simply turning the head unit through 90 degrees the Silhouette can be set-up for straight knife grinding. Power and coolant flow to each head are automatically switched when changing from one operation to another.



The Visage Grinding Centre



③ Dresser Arrangement

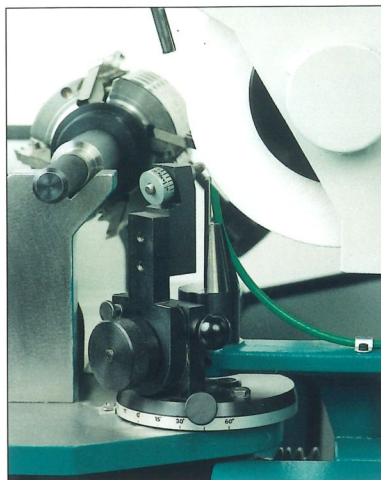
③ Operational safety is ensured with the unique diamond dresser design which keeps the operator clear of the wheel. A powered tilt facility is provided for setting relief and clearance angles at the touch of a button. The dressing unit maintains a correct wheel to stylus relationship at all times to guarantee a high level of accuracy.

NV Series Profile Grinder

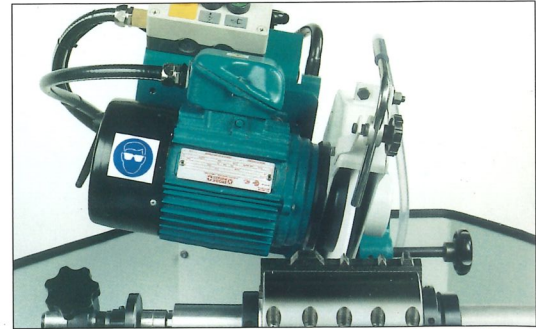
The NV Series Profile Grinder offers superior performance in the production and maintenance of moulding and planing knives to a concentric accuracy from a master template. The NV grinds HSS, Stellite and Tungsten Carbide tipped knives with maximum precision. The NV incorporates a bi-lateral linear action table which reduces operator fatigue by keeping movement to a single plane.

- 1 The diamond dresser unit is mounted directly onto the carriage and positioned away from the workpiece to allow safe wheel dressing without the need to remove safety guarding. The design of the dresser ensures highly accurate and controlled dressing of the wheel. The relationship between the

grinding wheel, tool and template is automatically maintained during dressing, thereby, overcoming the need to re-set after each operation. Calibrated adjustments allow for controlled variation of wheel width and form.

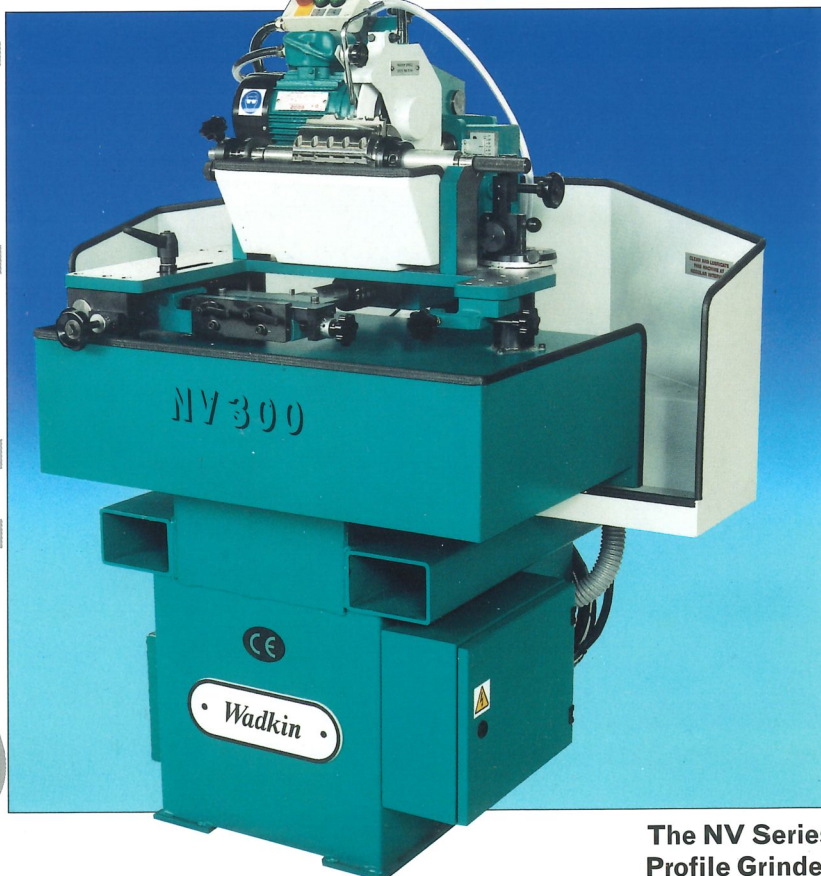


1 Diamond Dresser

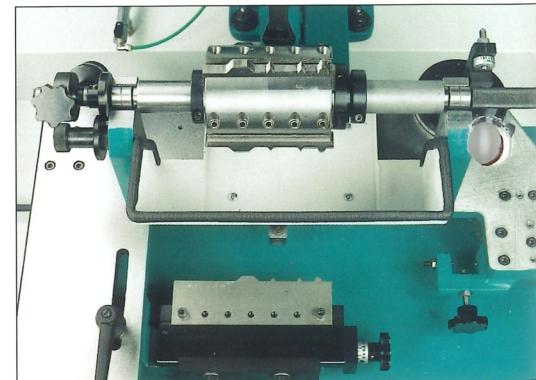


2 Head Tilt Mechanism

- 2 The 2-way head tilt mechanism is calibrated to allow an accurate and controlled side-relief grind, making redressing the grinding wheel unnecessary. The clearance angle is ground by re-positioning the grinding wheel relative to the cutter which remains in a constant position. With simple calibrated adjustments the wheel can easily be returned to the datum position.



The NV Series
Profile Grinder



3 Arbor Assembly

- 3 The NV arbor assembly is designed for simple, rapid set-up and set-down. The cutterhead can be conveniently and accurately positioned along the arbor with the aid of two clamping collars. The knives are held on the cutter rest by the counter balance weight which enhances operator flexibility and reduces fatigue.

Image 150 Profile Grinder

Mirage Template Maker

The Image 150 Profile Grinder brings the benefits of controlled in-house grinding to all users of woodworking machinery. Full linear table movement ensures exceptional accuracy and ease of use when grinding HSS and TCT knives. The Image 150 is a highly cost effective package providing the logical step towards a totally independent machining operation.

Mirage Automatic Template Maker

The Mirage Automatic Template Maker produces accurate templates in a fraction of the time of traditional methods and eliminates the possibility of human error in matching profiles. Using CNC technology, complex profiles can be drawn on screen and downloaded to the machining unit for rapid template production.

The Mirage makes light work of jobs which are normally difficult

and time-consuming to create manually.

- Perfect symmetry of templates is achieved to improve productivity and final component finish.
- CAD production of templates ensures that components, run as single pass multiples, are identical.

- With CAD control, scaling down profiles to suit variations in timber is no longer a problem for the toolroom.
- A perfect fit for male and female profiles can be created.
- Finished component checking gauges can be generated in either brass or plexiglass.



The Image 150 Profile Grinder



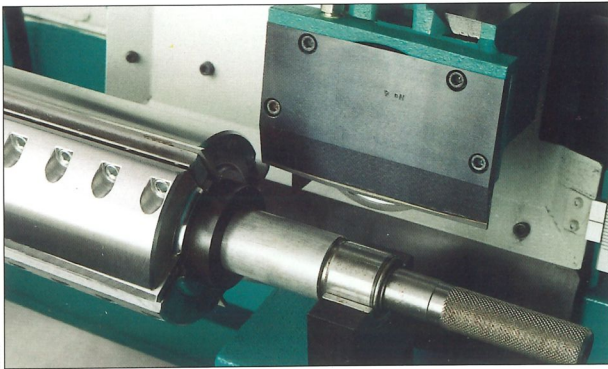
The Mirage Automatic Template Maker

NZ Series – Automatic Straight Knife Grinder

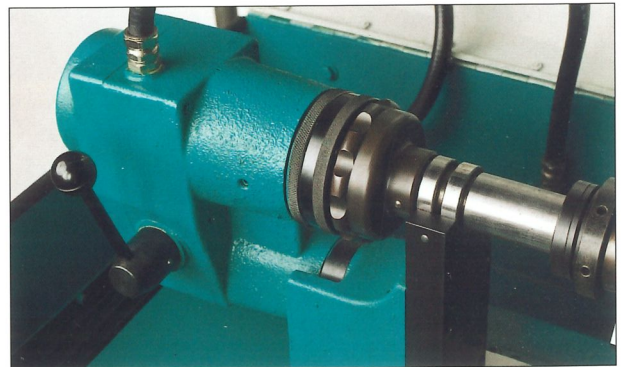
The NZ Automatic Knife Grinder is a 330mm capacity machine for grinding planer heads. The NZ's high concentric accuracy makes frequent rejointing on high speed planer moulders possible thereby extending cutter life by minimising the need for cutter resharpening. The machine set-up parameters are aided by computer instruction which maintains and monitors automatically the grinding process.



The NZ Automatic Knife Grinder



① Grinding Wheel and Infeed



② Arbor Assembly

① The grinding wheel increments forward automatically to take a predetermined cut off each blade. The machine can distinguish between the roughing operation and finishing cut or sparking out cut to ensure that only the required and minimal amount of material is ground away. A choice of depth of cuts can be pre-programmed to allow for maximum depth of cut when rough grinding, and for minimal finishing cuts or sparking out cuts.

This feature ensures a significant reduction in the cycle time coupled with consistent accuracy and quality of grind.

② The arbor assembly is designed for quick and easy loading/unloading and is attached to the index unit through a quick release coupling to eliminate the need for screws, spanners or keys. The cutterhead is spring loaded against a tungsten carbide knife guide to guarantee a high level of accuracy.

Long term grinding accuracy is assured by sealing the precision steel arbor bearings to prevent grinding debris causing wear to the arbor assembly. The indexing unit can be programmed for any number of knives to permit instant alterations without the need for time-consuming mechanical adjustments to the machine.

Setting and Measuring Equipment

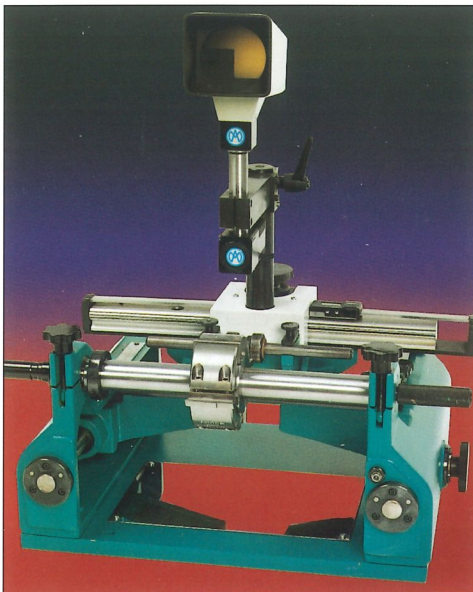
① Opti-Cass

The Opti-Cass is a versatile and economic computer aided setting system, incorporating all the features required for positioning the cutterhead accurately on a moulder with the minimum of delay. Simple and accurate to use, the Opti-Cass enhances efficiency by allowing the machine head references to be pre-set in the tool room.

The setting operation is carried out using a powerful hand held computer in conjunction with the MSS Setting Stand and a high definition Swiss-made optic probe.

② Simpla-Set

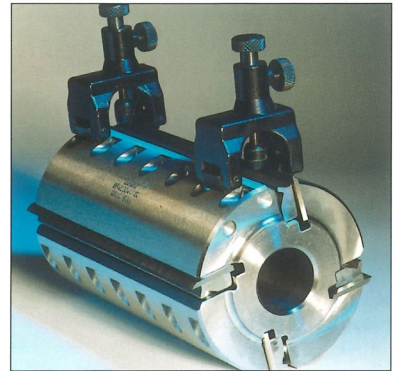
The Simpla-Set is a quality manufactured setting system for planing only or planing and moulding knife settings. The Simpla-Set is simple to operate and position. The compact unit provides a cost-effective answer to setting requirements.



① Opti-Cass

③ Magna-Set

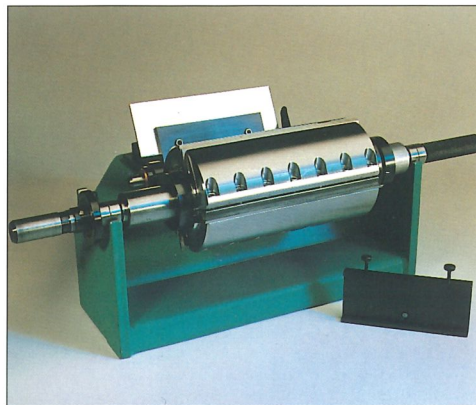
The Magna-Set is a compact setting system for planing knives and is available at an affordable price. The system is easy to operate and utilises a pair of simple magnetic setting devices. The Magna-Set can be used either in the tool room or in the workshop to set knives already fitted on a machine.



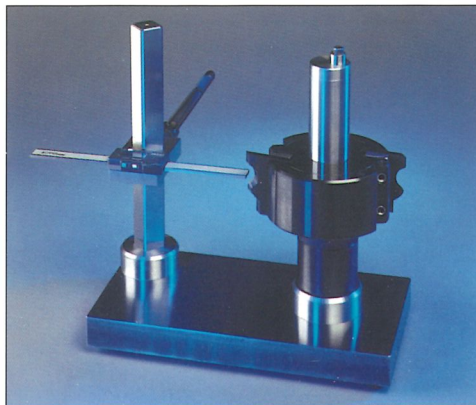
③ Magna-Set

④ Tooling Measuring Stand

A simple and effective stand for measuring the radius of straight and profile knives, this unit is suitable for machines with single and dual digital readouts and allows for quicker setting.



② Simpla-Set



④ Tooling Measuring Stand

Technical Information	SILHOUETTE	VISAGE	NZ300	NV300	IMAGE 150
Maximum cutterhead length					
Mechanical	315mm/12.4"	315mm/12.4"	310mm/12.25"	310mm/12.25"	150mm/5.9"
Hydrofix	335mm/13"	335mm/13"	330mm/13"	310mm/12.25"	–
Solid profile	245mm/9.6"	–	–	–	–
Maximum cutterhead diameter					
Profiling	350mm/13.8"	350mm/13.8"	–	300mm/11.8"	230mm/9"
Straight knife	300mm/11.8"	300mm/11.8"	300mm/11.8"	–	–
Solid profile	300mm/11.8"	–	–	–	–
Minimum cutting circle	70mm/2.75"	70mm/2.75"	80mm/3.15"	75mm/3"	70mm/2.75"
Spindle speeds					
Profile grinding	1500-3000rpm	1500-3000rpm	–	3000rpm	3000rpm
Optional variable speed	–	–	–	1500-3000rpm	–
Optional variable speed -60HZ supply	–	–	–	3600rpm	–
Straight knife/solid profile	3000-6000rpm	–	5000rpm	–	–
Table traverse speed			0-3M/0-10ft per/min		
Motor powers					
Profile grinding spindle	1.5kW/2HP	1.5kW/2HP	–	1.5kW/2HP	1.5kW/2HP
Straight knife/solid profile spindle	0.75kW/1HP	–	0.75kW/1HP	–	–
Powered tilt	0.025kW/0.03HP	0.025kW/0.03HP	–	–	–
Coolant pump	0.09kW/0.12HP	0.09kW/0.12HP	0.06kW/0.08HP	0.06kW/0.08HP	0.06kW/0.08HP
Table traverse	–	–	0.09kW/0.12HP	–	–
Coolant system tank capacity	36ltr/8gal	36ltr/8gal	32ltr/7gal	36ltr/8gal	32ltr/7gal
Machine dimensions					
Height	1560mm/62"	1560mm/62"	1115mm/44"	1500mm/59"	1340mm/53"
Depth	1090mm/43"	1090mm/43"	1090mm/43"	1100mm/43"	900mm/35"
Length	1150mm/45"	1150mm/45"	1825mm/72"	1270mm/50"	800mm/32"
Weight	570kgs 1256lbs	550kgs 1212lbs	800kgs 1762lbs	400kgs 881lbs	180kgs 397lbs

As our policy is constantly to improve design, the details given in this leaflet are not to be regarded as binding. Certain models illustrated are of CE specification. Please ask your local Wadkin representative for details of specifications to suit your area.

Certain illustrations show guarding removed for clarity.



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