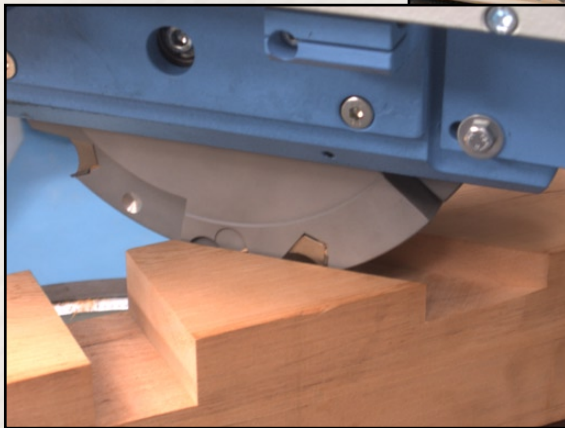
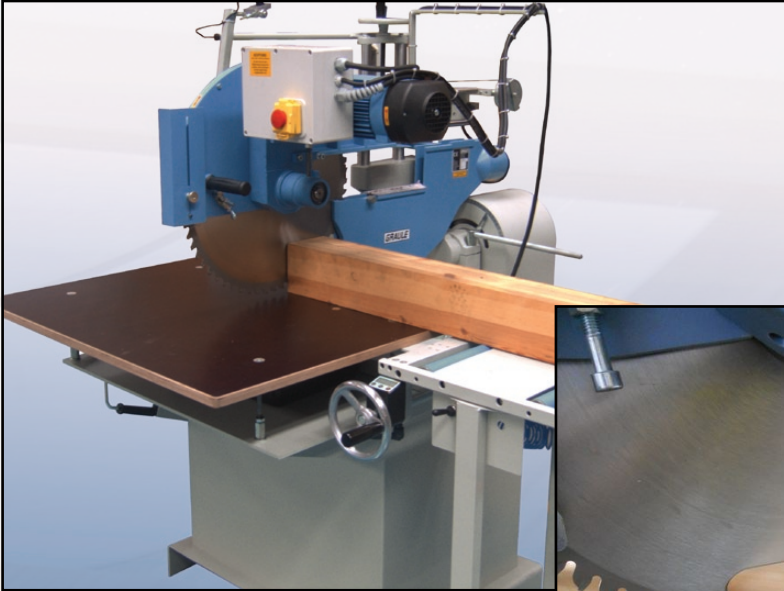


GRAULE

RADIAL ARM CROSS CUT SAWS & TRENCHERS

Precision straight or angled cutting of wood, aluminium, plastics and composites.



Graule ZS Range of Radial Arm Cross Cut Saws

Graule are a specialist German manufacturer of radial arm cross cut saws and trenchers, with the machines gaining excellent reputation for their build quality, reliability, ease of use, ergonomic design and precision cutting.

The main model range consists of:

ZS85 - max cutting depth at 90 degrees 85mm.

ZS170 - max cutting depth at 90 degrees 170mm.

ZS200 - max cutting depth at 90 degrees 200mm.

Standard Features Include:

- Precision linear bearing movement on hardened steel bars.
- Sturdy cast iron construction with steel stand.
- Hand wheel rise and fall of blade.
- Horizontal angle setting.
- Electrically braked motor.
- Adjustable aluminium fences.
- Spring return.
- Full guarding.

One of the unique features of all machines is that when horizontal angle cutting is required (swivel) the saw unit pivots about a central point thus always maintaining the same cutting length. This facility is particularly useful for timber frame house construction, sheds, garden buildings and furniture where traditionally angled cutting is an important requirement. In addition Graule saws offer an impressive height of cut which is generally not available on other machines of this size.



When any of the models are supplied in the 'N' configuration the saw blade can angle (tilt) in the vertical up to 45 degrees, thus enabling a compound angle cut. If the optional tilting of the head via handwheel is specified (on saws only) the saw head can be tilted plus 45 degrees and minus 30 degrees.

Graule Model QN/F Radial Arm Trenching And Notching Machine

The Graule QNF has been specifically designed for producing straight/ angled notches or trenches in solid wood joinery and furniture components.

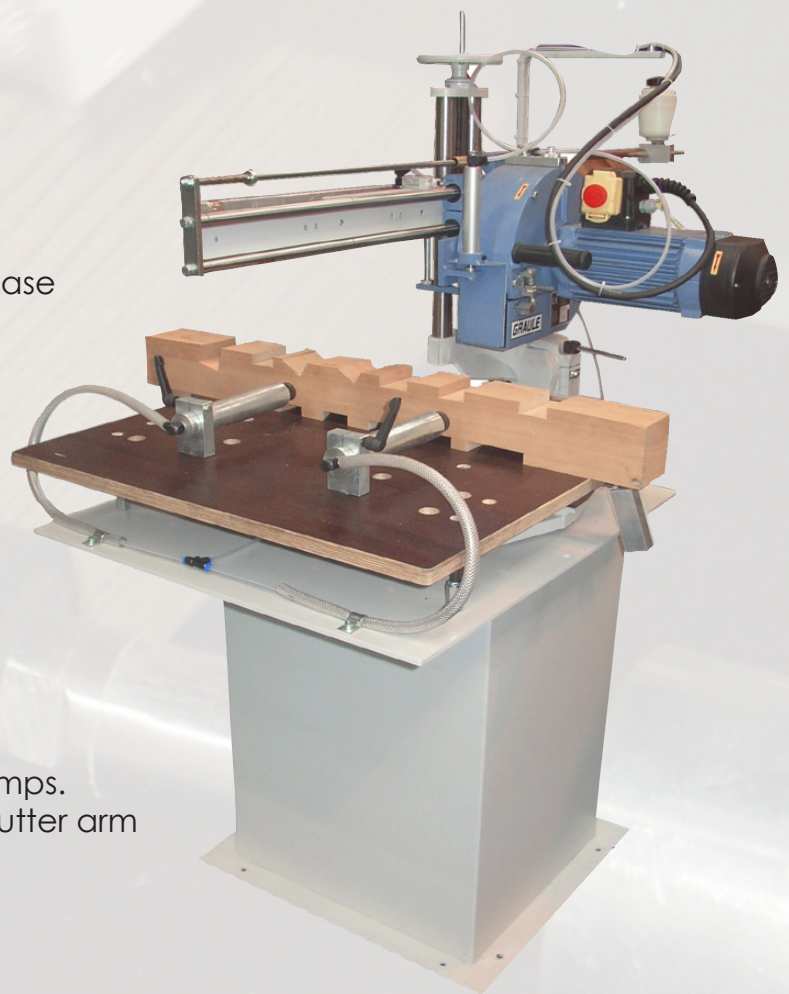
Typical applications include garden furniture, sheds, gates, log cabins, roof trusses, and door framing.

As standard the machine is fitted with horizontal work piece clamping and a manual adjustable hydrocheck unit to help prevent the cutter 'snatching' at the timber. The cross arm and cutter head can both swivel and tilt to produce a compound notch. An additional safety feature is the automatic pneumatic lifting / closing of the front nose guard meaning that the cutter block is totally enclosed in the rest position.

The machine can be specified with a TCT disposable tip trenching tool that as standard is adjustable from 30mm to 60mm in width. On request other sizes can be specified e.g. 25mm to 50mm, 15mm to 30mm.

Standard Features Include:

- Precision linear bearing movement on hardened steel bars.
- Sturdy cast iron construction with steel base stand.
- 3kw motor. Electrical braking.
- Max tool diameter 250mm
- Bore of tool 40mm.
- Handwheel rise and fall of cutter motor arm.
- Max depth of trench / notch 60mm.
- Max width of trench / notch 60mm (in one pass).
- Max length of travel of tool 250mm.
- Horizontal angle setting 45° - 90° - 45°
- Vertical angle setting 45° - 90°
- 2 x horizontal pneumatic workpiece clamps.
- Hydrocheck damper to movement of cutter arm
- Adjustable aluminium fences.
- Spring return.



General Specifications & Capacities

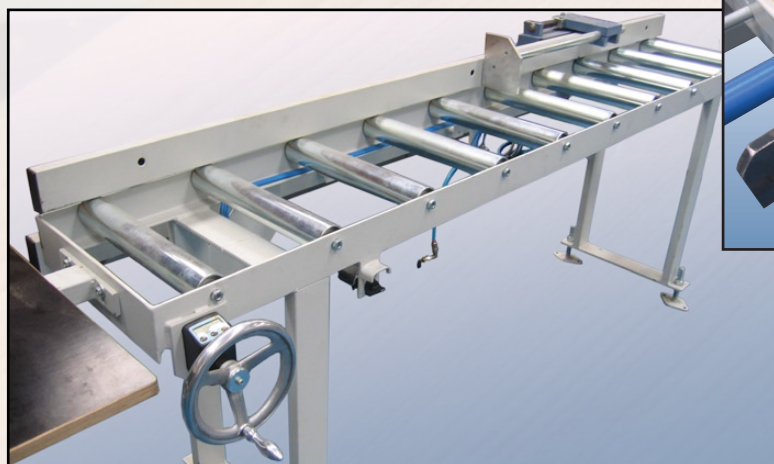
model	ZS85 (N)	ZS170 (N)	ZS200 (N)	QNF (W-N)
motor power	2Kw	3 Kw	5 Kw	3 Kw
max cutting width at 90°	380 mm	430 mm	420 mm	250 mm
max cutting depth at 90°	85 mm	170 mm	200 mm	60 mm
max blade / tool diameter	300 mm	420 mm	520 mm	250 mm
max width of notch / trench	N/A	N/A	N/A	60 mm
horizontal angle setting	45° / 90° / 45°	45° / 90° / 25°	45° / 90° / 20°	45° / 90° / 45°
vertical angle setting (N model only)	45° / 90°	45° / 90°	60° / 90° / 30°	45° / 90°
dust extraction outlet diameter	75 mm	100 mm	100 mm	100 mm

Available Options:

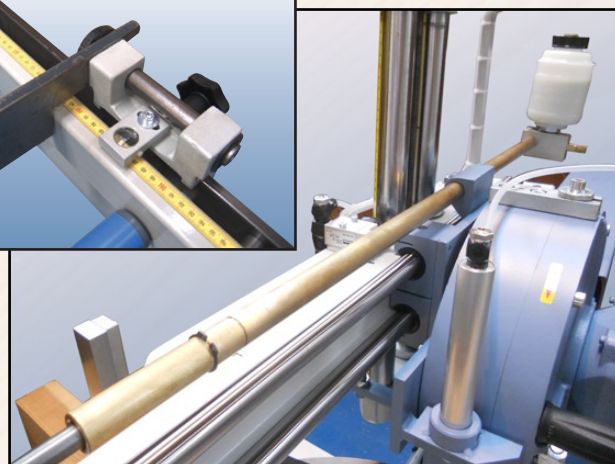
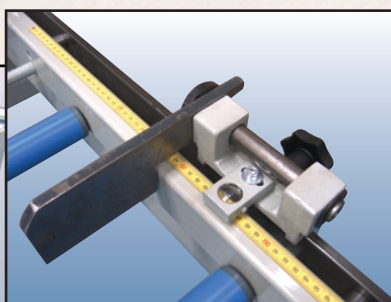
- Left / right roller tables, mechanical flips stops, LCD stops with handwheel movement.
- Crank handle adjustment from the front of the machine of vertical tilt (N model) of the saw
- Digital read outs for the horizontal and / or vertical angle setting.
- Pneumatic work piece clamps (std on QNF).
- Blades for cutting aluminum / plastics.
- Hydraulic brake / damper for saw head movement.
- Motorised NC setting of the horizontal and or vertical angle setting.
- Extended cutting stroke.
- Pneumatic spray for cutting none ferrous metals.
- Laser line for alignment of saw.



Vertical tilt from front of machine with digital angle display.



Heavy duty roller tables, with adj. stop and LCD readout.



Hydrocheck damper.

All specifications and options are subject to manufacturers change without prior notice.

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