



R16 High Frequency Ring Saw

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Internal & Confidential

AGP | R16 High Frequency Ring Saw

AGP TAIWAN

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Introduction

Target group & Applications

Introduction & Target Group

The R16, together with its P8K Power Converter, is a uniquely capable tool for professional concrete cutters and contractors. Its water cooled 6200 W high frequency motor provides the power for the fastest possible deep cutting in reinforced concrete, and its electronic controls grant excellent performance, motor protection, and operator useability.

The R16 is a special tool in a concrete cutter's arsenal, being able to perform extremely deep cuts due to its blade being driven from the side, rather than the center, as other saws do. This allows its 405 mm blade to achieve a full 300 mm depth of cut; a depth that would need a wall saw with at least a 700 mm blade to perform otherwise. Being able to take the place of a wall saw in certain circumstances means that having a ring saw can save a huge amount of time and cost. The offset drive of the blade also allows the blade to plunge past its center, allowing corners without overcuts. These capabilities are also possible with a diamond chainsaw, but with a ring saw, the speed of cutting is faster, and the cost per linear meter is much less.

The R16 is a unique ring saw in the industry with its patented blade drive design. This allows easy and accurate drive tension adjustment (even on the fly), as well as easier blade changes.

Applications

The R16 will generally be used in situations that require cutting depths beyond what is possible with a hand saw, as well as cutting clean corners without overcuts. Often operators will precut as much as possible with a hand saw first; to save time and cost. A ring saw is very useful in finishing door or window cut outs in extra thick walls. When you have a job that requires a ring saw, the R16 is your best choice.



Sales Arguments



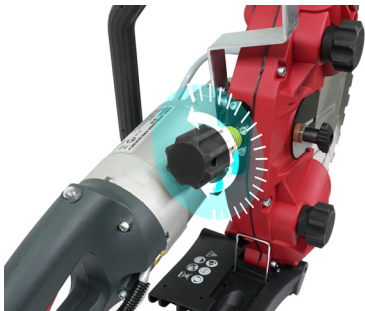
Simple Side-Thrust Tuning

Maximum-stability guide-roller design keeps the blade centralized.



Splash Guards

Flexible upper and bottom splash guards prevent splashing slurry.



One-Step Blade Tensioning System

Patented One Step Drive Tensioner makes fast and easy blade adjustment and keeps tension equalized.



Ergonomic Handle Design

Optimum control and minimized fatigue.



LED Load Indicator

LED Indicator Indicates load conditions (electronic & thermal protection).

Waterproof Hall Effect Switch

Hall Effect Switch is impervious to dust or water



Quick & Easy Blade Changing

No need to strip the drive cover to change the blade.

Technical Specification



Model	R16
Power	3 Ø ~380-480 V 6200 W 1 Ø ~200-240 V 5500 W (32 A), 3600 W (16 A)
No Load Speed	2500/min
Linear Speed with 16" blade	53.1 m/s
Blade Diameter	400 mm (15-3/4")
Max. Cutting Depth	300 mm (11-13/16")
Cable Length	6 M
Dimensions (L x W x H)	830 x 240 x 460 mm
Weight	13 kg (28.6 lb)

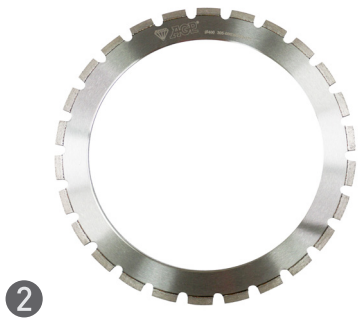


Model	P8K
Power Input (maximum)	3 Ø ~380-480 V 16 A 8000W 1 Ø ~200-240 V 32 A 7000W
Min. Water Flow (25°C)	3.5 L/min (1 gpm)
Max. Water Pressure	7 bar (100 psi)
Dimensions (L x W x H)	460 x 220 x 260 mm
Weight	7.1 kg (15.6 lb)

Offer Content

Standard Accessories

- 1 R16 High Frequency Ring Saw
- 2 405mm Ring Saw Blade
- 3 T-Wrench
- 4 Face Spanner



Comparison Table

AGP

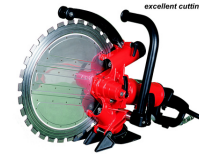
Husqvarna

WEKA
ELEKTROWERKZEUGE

DR. BENDER
INNOVATIVE ELEKTROWERKZEUGE

HYCON













Brand



Model	R16		K6500 Ring	TR40	Kogia	HRS 400
Motor Type	PMSM (permanent magnet, synchronous)		3-Induction, high cycle	3-Induction, high cycle	3-Induction, high cycle	Hydraulic
Power (Input) 3Ø~380-480 V	6200 W (16A)		5500 W	6500 W	8000 W	30-40 L/min @ 160 bar
Efficiency 3Ø~380-480 V	90%		75%	74%	68%	not listed
Power (Input) 1Ø~200-240 V	3700 W (16 A) w/ adaptor cable 5500 W (32 A) wired direct to breaker		3500 W	3700 W	4000 W	N/A
Efficiency 1Ø~200-240 V	84%		74%	73%	65%	N/A
Blade Size	400 mm (15-3/4")		370 mm (14.6")	400 mm (16")	400 mm (16")	400 mm (16")
Depth of Cut	300 mm (11-13/16")		270 mm (10.6)	300 mm (11.8")	300 mm (11.8")	300 mm (11.8")
Waterproof / Dustproof Hall Effect Switch	Yes		No	No	No	No
Side Gap to Wall	76 mm (3")		88 mm (3.5")	not listed	not listed	not listed
Rated RPM	2500 /min		2000 /min	2400 /min	2200 /min	2350 /min
Linear Speed	53.0 m/s (174 fps)		38.7 m/s (127 fps)	50.2m/s (165 fps)	46 m/s (151 fps)	49 m/s (161 fps)
Blade system	3 grooves		1 groove	2 grooves	3 grooves	3 grooves
Blade Water Feed	Water Plate		Water Plate	Water Plate	Feed to rollers only	Water Plate
Overload protection LED indicator	YES		NO	NO	NO	NO
One Step Tension System	One-step (Patented)		By 2 Guide Rollers (conventional)	By 2 Guide Rollers (conventional)	By 2 Guide Rollers (conventional)	By 2 Guide Rollers (conventional)
Weight	13.0 kg (28.6 lb)		13.1 kg (28.8 lb)	13.5 kg (29.7 lb)	11.5 kg (25.3 lb)	10.2 kg (22.4 lb)
IP Class	IP55		IP54	IP55	IP67	IP67

Conclusion The **AGP** has the highest output power in this group. This is due to its superior PMSM motor design, which has much higher efficiency than the induction motor designs used by the others. The performance of the **AGP** on single phase current is also dramatically superior.

Comparison Table

Brand						
						
Model	P8K	FU6 U	PP65	PB RX/SX 12	HPP18E	HPP18V FLEX
Power 3Ø 380 V-480 V	16 A (8000 W) (max)	13.5 A (6500 W)	12 A (6500 W)	15 A (12000 W)	11,000 W 3-400 V	Engine: Vanguard 18 HP
Power 3Ø 220 V-240 V	32 A (7000 W) (max)	N/A	At Decreased Power (not quoted)	N/A	N/A	N/A
Power 1Ø 220 V-240 V	32 A (7000 W) (max)	16 A (3700 W)	16 A (3500 W)	16 A (4000 W)	Max Pressure: 160 bar	Max Pressure: 160 bar
Information Indicator	LCD display	2 Flashing LEDs	LCD display	3 Flashing LEDs	N/A	N/A
Min. Water Flow (25°C)	3.5 l/Min (1 gpm)	Not Listed	Not Listed	Not Listed	N/A	N/A
Max. Water Pressure	7 bar (100 psi)	3 bar (45 psi)	[Air Cooled]	3 bar (45 psi)	N/A	N/A
Weight	7.1 kg (15.6 lb)	Not Listed	9.5 kg (20.9 lb)	16.5 kg (36.4 lb)	128 kg	105 kg
Dimensions (LxWxH)	460 x 220 x 260 mm	Not Listed	419 x 184 x 351 mm	469 x 173 x 400 mm	805 x 625 x 695 mm	805 x 625 x 695 mm
Packing	Strong Carton	Not Listed	Wooden case	Not Listed	Not Listed	Not Listed
Conclusion	<p>All of the converters can be connected to single phase power with a 16A limitation. But the P8K converter is the only converter here which can be wired directly to a 32A breaker for high power levels on single phase input. All the others cannot exceed 16A, which is very troublesome in cases where 3 phase power is unavailable. The P8K is the only unit here which solves this problem.</p> <p>The Hycon is a very capable machine, but it is expensive and the operator needs to transport a power pack to the jobsite which weighs over 100kg, plus the hydraulic hoses, etc.</p> <p>The AGP R16 + P8K is clearly the best and most versatile machine.</p>					

Tool Dimension

