

BG5 HIGH FREQUENCY BRUSHLESS CONCRETE GRINDER & P4K POWER CONVERTER

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Internal & Confidential

AGP | BG5 Brushless Concrete Grinder



AGP TAIWAN

Lee Yeong Industrial Co., Ltd.

No.2, Kejia Rd., Douliu City, 64057, Taiwan

Tel : 886-5-5518689 Fax : 886-5-5518635

AGP EUROPE BV

Evenbroekveld 16D, 9420 Erpe-Mere, Belgium

Tel : +32 53 21 62 22 Fax : +32 53 83 88 20



Introduction

Target Groups & Applications

BG5 & P4K Introduction & Applications

The BG5 features a high frequency PMSM brushless motor which has dramatically higher efficiency than traditional universal motors. Being brushless, the motor is maintenance free and its lifespan is many times longer than a universal motor.

The BG5, with its P4K power converter, are made to endure intensive use in the harshest work conditions. Having IP55 ingress protection allows them to be cleaned after working with hazardous materials, and generally helps them survive in a dusty work environment.

The BG5 is purpose-built and designed for ideal concrete grinding performance while maintaining strict dust control. The variable constant speed function gives the tool excellent

versatility. The vertical design works especially well for grinding floors.

By using different types of diamond cup wheels, a vast array of different tasks can be done; from surface grinding and leveling, to stripping coatings, to surface preparation for applying coatings.

Target Groups

- Intensive Use Contractors
- Concrete Polishing Specialists
- Asbestos Removal Specialists
- Nuclear Power Plant Decommissioning Specialists



BG5 Sales Arguments



Brushless PMSM motor has much higher efficiency and many times longer life than universal motors. Suited to long duty cycles in harsh operating conditions.



IP55 Ingress Protection
The motor unit is totally enclosed, protecting it from water and dust ingress. The grinder can be thoroughly washed, withstanding low pressure water jets, making it ideal for working with hazardous materials such as asbestos.



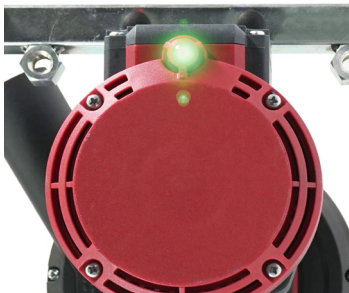
Variable speed settings on the converter for different applications and materials.



Effective dust control skirt with spring suspension



Tool-free sliding cover for edge grinding



LED Load Indicator enables the operator to work at peak effectiveness, maximizing productivity.



Air-cooled power converter operates on single phase supply in a full range from 100 V up to 240 V. The LCD Information Display shows voltage, error codes, and elapsed hours.



Replaceable brush bristles for smooth action and efficient dust containment



Anti-vibration mountings for maximum operator comfort



Floor Grinding Trolley

Technical Specifications



Model	BG5
Power Input	2200 W
*No Load Speeds	3850 - 5800 min ⁻¹
Wheel Diameter	125 mm (5")
Arbor	22.23 mm (7/8")
Spindle	M14 or 5/8-11 (Specify when ordering)
Ingress Protection	IP55
Dimensions (LxWxH)	235 x 290 x 235 mm
Weight	5.1 kg (11.3 lb)



Model	P4K
Voltage	100 V-240 V~ 50-60 Hz
Max. Power Input	1~ 4500 W
Max. Power Output	3~ 4000 W
Ingress Protection	IP55
Weight	3.1 kg (6.9 lb)

Offer Content

Standard Accessories

- ① BG5 Concrete Grinder
- ② Blow Molded Case
- ③ Lock Nut Wrench
- ④ Face Spanner Wrench
- ⑤ M6 L-Hex Key

Recommended Item

- ⑥ Floor Grinding Trolley
- ⑦ DS25L Vacuum Cleaner



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Comparison Table

Brand

AGP®

HILTI

DEWALT

High Frequency Concrete Grinder



Model	BG5	DGH 150	DWE46253
Motor Type	PMSM (permanent magnet synchronous) 👍	SR Motor w/ Integrated Converter	BLDC
Power Input	2200 W	2100 W	1600 W
Rated Load Speed (/min)	3850,4200,4500,4850,5150,5500,5800	4500,5050,5700,6350,7000	2000,4500,6000,7500,9000
Wheel Ø	125 mm	150 mm	125 mm
Spindle Thread	M14	M10	5/8"-11 UNC
Arbor	22.23 mm	19 mm	22.23 mm (7/8")
Dimensions (LxWxH)	235 x 290 x 235 mm	500 x 250 x 230 mm	L: 330 mm
Weight	5.1 kg	5.6 kg	3.1 kg
Power Converter	Separate (P4K)	Integrated	Integrated
Constant Speed	yes	yes	yes
LED Load Indicator	yes	yes	yes
Variable Speed	6 Speeds 👍	5 Speeds	5 Speeds
Ingress Protection	IP 55 👍	not listed	not listed
Insulation Class	Class II	Class II	Class II
Anti-Restart	yes	yes	yes
Dustproof Hall Effect Switch	yes 👍	no	no
Overload Protection	yes	yes	yes
Thermal Protection	yes	yes	yes
Soft Start	yes	yes	yes
Edge Cut-Out	yes	yes	yes
Spring Suspension Skirt	yes 👍	no (rigid w/ adjustable height)	no (without adjustable height)
Adjustable Handle	no (anti-vibration mountings)	yes	yes
Trolley Compatible	yes (optional)	no	no
List Price, Germany w/o tax	N/A	2,566.15 €	\$399.00 USD

AGP® | BG5 Brushless Concrete Grinder

Comparison Table

Brand



Converter



N/A (Integrated Converter)

N/A (Integrated Converter)

Model	P4K
Power Input (max.)	4500 W
Power Output (max.)	4000 W
Supply Voltage	100-240 V ~ 50-60 Hz
Weight	3.1 kg
Ingress Protection	IP 55
Insulation Class	Class I
RCD (built-in)	yes
Cooling	Air Cooled
Thermal & Overload Protection	yes
Under Voltage Protection	yes
Over Voltage Protection	yes
LED Indicator	yes
LCD Information Display	yes
Elapsed & Total Hours	yes
Elapsed Hours Reset	yes
Error Codes	yes
Voltage Display	yes
RPM Display	yes
Conclusion	The AGP machine, with its PMSM motor, has more power and superior efficiency over the SR motor of the Hilti or the 1600 W BLDC of the Dewalt. The AGP unit has more choice in RPM, having 7 settings, compared to only 5 settings on the Hilti or the Dewalt. The AGP spring suspension dust skirt, being self-adjusting, gives better dust containment than the rigid skirt of the Hilti. The features of the AGP converter are far more useful and give much more information than the Hilti or the Dewalt. Also, the Hilti and Dewalt can only use one voltage, while the AGP can cover the full range of voltage in one unit. For a different voltage with the Hilti or the Dewalt, you need to buy a different tool. Frankly, the Dewalt is just a much lighter duty tool than the others. The AGP system gives the user more functions.

Tool Dimensions (mm)

