



BG125 HIGH FREQUENCY BRUSHLESS CONCRETE GRINDER & P4K POWER CONVERTER

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Internal & Confidential

AGP | BG125 Concrete Grinder

AGP TAIWAN

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Introduction

Target group & Applications

BG125 & P4K Introduction & Applications

The BG125 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 BG125, 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 BG125 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 Group & Applications

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



Sales Arguments



1 LED Indicator



2 Spring Suspension



3 Ergonomic Front Handle



4 Half-Moon Door



5 Variable Constant Speed



6 Special Waterproof Switch

1 LED Indicator

LED Indicator for optimizing grinding efficiency with overload and overheat warning.

2 Spring Suspension

Outstanding dust control is achieved with the dust skirt with brush and spring suspension

3 Ergonomic Front Handle

Adjustable ergonomic front handle allows clearance for edge grinding.

4 Half-Moon Door

Half-Moon Door for grinding up to the edge.

5 Variable Constant Speed

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

6 Special Waterproof Switch

Hall-Effect Switch is completely waterproof and dustproof. Includes anti-restart function.

Sales Arguments



PMSM Motor

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.



P4K Power Converter

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.

Technical Specification

Model	BG125
Power Input	2200 W
*No Load Speeds	3550 - 5350 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)	455 x 200 x 175 mm
Weight	4.6 kg (10.1 lb)

- ① Power Supply Cable
- ② Trigger Switch
- ③ Load Warning Lamp
- ④ High Frequency Motor
- ⑤ Knob
- ⑥ Spindle Lock Button
- ⑦ Front Handle
- ⑧ Lock Button
- ⑨ Dust Port
- ⑩ Dust Skirt
- ⑪ Tab
- ⑫ Half-Moon Door



Offer Content

Standard Accessories

- ① BG125 Concrete Grinder
- ② Blow Molded Case
- ③ Lock Nut Wrench
- ④ Face Spanner Wrench



①



②



③



④

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②



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Recommended Item

- ⑤ DS25L Vacuum Cleaner



⑤

Comparison Table

Brand



High Frequency Concrete Grinder



Model	BG125	DGH 150	DWE46253
Motor Type	PMSM (permanent magnet synchronous)	SR Motor w/ Integrated Converter	BLDC w/ Integrated Converter
Power Input	2200 W	2100 W	1600 W
Rated Load Speed (/min)	3550,3850,4150,4450 4750,5050,5350	4400,5050,5700,6350, 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)	455 x 200 x 175 mm	500 x 250 x 230 mm	L: 330 mm
Weight	4.6 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	yes	yes	yes
Trolley Compatible	no	no	no
List Price, Germany w/o tax	N/A	2,566.15 €	\$399.00 USD

Comparison Table

Brand

AGP[®]

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)

