

Flextool[®]

CONCRETE GRINDING GUIDE



The Flextool Planetary Concrete Grinder

delivers exceptional grinding and polishing capability, and is ideal for achieving a smooth, scratch-free and consistent finish. Its multiple rotating head design ensures uniform results and high productivity, making it ideal for medium-sized residential and commercial projects.



The Flextool Single Head Concrete Grinder

is designed for efficient and aggressive grinding, and offers enhanced manoeuvrability and precise, targeted grinding where required.

This grinder is ideal for small and medium residential or commercial projects where coating removal, levelling high spots, or general concrete grinding and surface preparation are needed.

EXPOSED AGGREGATE WITH CLEAR FINISH

Desired surface finish outcome

Exposed aggregate with clear finish

Environment

External

Determine concrete hardness	Recommended grinding shoe type
Soft Concrete	SC black
Medium Concrete	MC silver
Hard Concrete	HC white
Very Hard Concrete	VHC gold

Recommended grit

16, 40, 80

Equipment

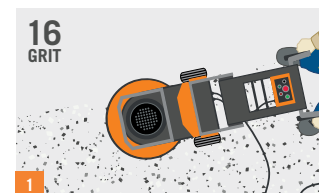
Planetary Concrete Grinder

Type of coating or application

Single pack solvent based concrete clear sealer



STEPS



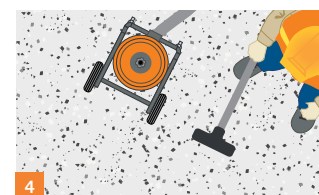
Grind the concrete using 16 grit diamond shoes to remove the top layer until the desired amount of aggregate is visible. Grind the entire area. This is usually a very time consuming process.



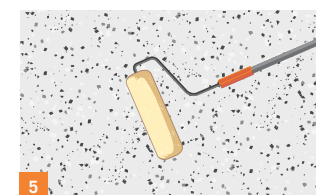
Attach 40 grit diamond shoes and grind over the entire surface again until all scratches left from the 16 grit diamond shoes are no longer visible.



Attach 80 grit diamond shoes and grind over the entire surface again until all scratches left from the 40 grit diamond shoes are no longer visible.



Using a dust collector with the wand and floor tool, vacuum all dust and clean the surface as per the coating manufacturer's instructions.



Apply the coating as per the manufacturer's instructions.

Note: These steps are provided as a guide only. Specific project requirements may vary, you should always take into consideration your specific project requirements and amend your processes as required.

NON-EXPOSED AGGREGATE WITH CLEAR OR COLOURED FINISH

Desired surface finish outcome
Non-exposed aggregate with clear or coloured finish

Environment
External

Determine concrete hardness	Recommended grinding shoe type
Soft Concrete	SC black
Medium Concrete	MC silver
Hard Concrete	HC white
Very Hard Concrete	VHC gold

Recommended grit
40, 80

Equipment
Planetary Concrete Grinder

Type of coating or application
Single pack solvent based concrete clear or coloured sealer



EXPOSED AGGREGATE WITH CLEAR FINISH

Desired surface finish outcome
Exposed aggregate with clear finish

Environment
Internal

Determine concrete hardness	Recommended grinding shoe type
Soft Concrete	SC black
Medium Concrete	MC silver
Hard Concrete	HC white
Very Hard Concrete	VHC gold

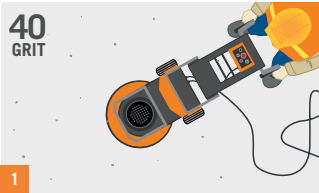
Recommended grit
16, 40

Equipment
Planetary Concrete Grinder

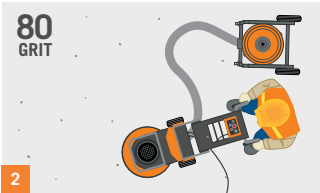
Type of coating or application
2-Pack clear coating



STEPS



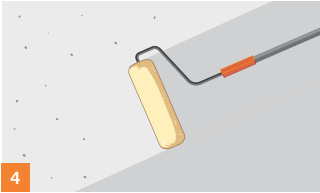
Grind the concrete using 40 grit diamond shoes to remove any imperfections on the surface. Do this until the floor is ground to a consistent level.*



Attach 80 grit diamond shoes and grind over the entire surface again until all scratches left from the 40 grit diamond shoes are no longer visible.



Using a dust collector with the wand and floor tool, vacuum all dust and clean the surface as per the coating manufacturer's instructions.



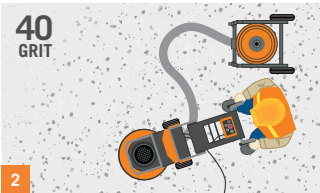
Apply the coating as per the manufacturer's instructions.

* Too much grinding will result in exposing the aggregate.
Note: These steps are provided as a guide only. Specific project requirements may vary, you should always take into consideration your specific project requirements and amend your processes as required.

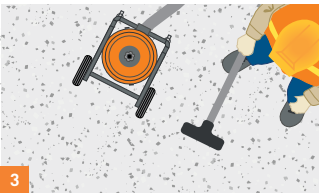
STEPS



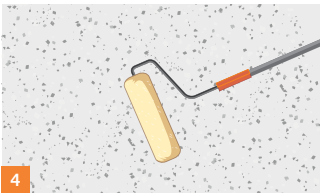
Grind the concrete using 16 grit diamond shoes to remove the top layer until the desired amount of aggregate is visible. Grind the entire area.



Attach 40 grit diamond shoes and grind over the entire surface again until all scratches left from the 16 grit diamond shoes are no longer visible.



Using a dust collector with the wand and floor tool, vacuum all dust and clean the surface as per the coating manufacturer's instructions.



Apply the coating as per the manufacturer's instructions.

Note: These steps are provided as a guide only. Specific project requirements may vary, you should always take into consideration your specific project requirements and amend your processes as required.

NON-EXPOSED AGGREGATE WITH CLEAR OR COLOURED FINISH

Desired surface finish outcome
Non-exposes aggregate with clear, coloured or flake finish

Environment
Internal

Determine concrete hardness	Recommended grinding shoe type
Soft Concrete	SC black
Medium Concrete	MC silver
Hard Concrete	HC white
Very Hard Concrete	VHC gold

Recommended grit
16*, 40

Equipment
Planetary Concrete Grinder

Type of coating or application
2-Pack clear or coloured coating



REMOVAL OF OLD GLUES AND COATINGS

Desired surface finish outcome
Removal of old glues and coating

Environment
Internal and external

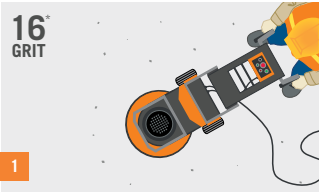
Determine concrete hardness	Recommended grinding shoe type
Soft Concrete	SC black
Medium Concrete	MC silver
Hard Concrete	HC white
Very Hard Concrete	VHC gold

Recommended grit
PCD* / 16 grit Arrow Segment^ / 40

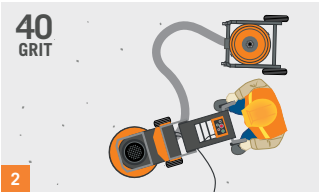
Equipment
Single Head or Planetary Concrete Grinder



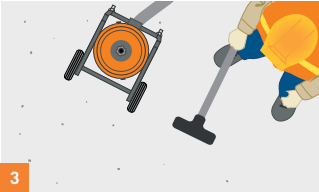
STEPS



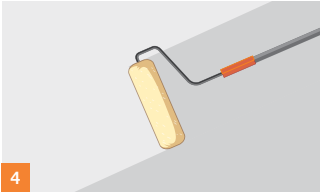
Grind the concrete using 16 grit diamond shoes to remove the top layer until the desired amount of aggregate is visible. Grind the entire area.



Attach 40 grit diamond shoes and grind over the entire surface again until all scratches left from the 16 grit diamond shoes are no longer visible.



Using a dust collector with the wand and floor tool, vacuum all dust and clean the surface as per the coating manufacturer's instructions.

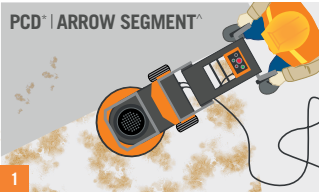


Apply the coating as per the manufacturer's instructions.

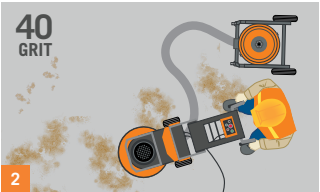
* If required - e.g. older floor, rough or damaged floor.

Note: These steps are provided as a guide only. Specific project requirements may vary, you should always take into consideration your specific project requirements and amend your processes as required.

STEPS



Grind the concrete with PCD or 16 grit Arrow Segment shoes over the entire surface until all the coating or glue is removed.



Grind the concrete using 40 grit diamond shoes to remove any remaining glues or coatings on the surface. Do this until the floor is ground to a consistent level.



Using a dust collector with the wand and floor tool, vacuum all dust and clean the surface.

NOTE: If a coating is to be (re)applied, follow the appropriate grinding steps suitable for the desired finish and application.

* Removal of thick coatings, such as epoxies and glues.

^ Removal of thin coatings, such as paints and sealants.

Note: These steps are provided as a guide only. Specific project requirements may vary, you should always take into consideration your specific project requirements and amend your processes as required.

FLEXTOOL EASY LOCK GRINDING SHOES

The Flextool Easy Lock Grinding Shoes feature a high diamond concentration and large segment size for optimum grinding efficiency and durability. The Easy Lock system allows for quick and easy connection and is compatible with Redi Lock systems.

These grinding shoes are suitable for use on a range of concrete types including soft, medium, hard, and very hard. Depending on the grit size that is used, the grinding shoes can achieve both course and smooth finishes. PCD and Arrow segment shoes are also available for the removal of thick or thin surface coatings, such as glues or paints.

Compatible with a wide range of grinding equipment.



Application	Colour	Bond Type	Number of Segments	Diamond Grit Size	Pack Qty	Product Code
Soft Concrete	Black	Hard Bond	2	16 grit	3	FT100473-UNIT
				40 grit	3	FT100474-UNIT
				80 grit	3	FT100475-UNIT
				100 grit	3	FT100476-UNIT
Medium Hardness Concrete	Silver	Medium Bond	2	16 grit	3	FT100477-UNIT
				40 grit	3	FT100478-UNIT
				80 grit	3	FT100479-UNIT
				100 grit	3	FT100480-UNIT
Hard Concrete	White	Soft Bond	2	16 grit	3	FT100481-UNIT
				40 grit	3	FT100482-UNIT
				80 grit	3	FT100483-UNIT
				100 grit	3	FT100484-UNIT
Very Hard Concrete	Gold	Very Soft Bond	1	16 grit	3	FT100485-UNIT
				40 grit	3	FT100486-UNIT
				80 grit	3	FT100487-UNIT
				100 grit	3	FT100488-UNIT
Thick Coatings (Epoxy, Glue)	Red	PCD	3	N/A	3	FT100489-UNIT
Thin Coatings (Paint, Sealant)		Soft Bond	2	16 grit	3	FT100490-UNIT



FLEXTOOL PORTAGRIND®

The Flextool PortaGrind FCG-125 is a compact and powerful handheld concrete grinder, purpose-built for edge work and tight access grinding applications. This portable unit is perfect for grinding along walls, slab edges, around columns, and in hard-to-reach spaces where larger machines can't go.

Fitted with a 1500 W electric motor featuring a soft start function, the Flextool PortaGrind delivers efficient, controlled grinding performance. The variable speed dial allows users to adjust grinding speed from 3000 to 8500 rpm, ensuring optimal results across a variety of surfaces and materials.



Model	Grinding Width mm (in)	Operating Weight kg (lb)	Voltage V/Hz	Power W	Grinding Speed rpm	Spindle / Arbour Size mm (in)	Dust Outlet mm (in)	Power Cord Length m (ft)	Product Code
FCG-125	125 (5)	3.85 (8.5)	240 50	1500	3000 to 8500	22.2 (0.87)	32 (1.26)	2.5 (8.2)	FT100509-UNIT

FLEXTOOL SINGLE HEAD CONCRETE GRINDER

FCG-250

The Flextool Single Head Concrete Grinder FCG-250 is compact in design and delivers exceptional grinding capability. The combination of the direct drive system and the motor positioned directly over the grinding head, allow for efficient and aggressive grinding. Designed for professionals, the FCG-250 has a detachable grinding head for easier transportation, a folding handle with adjustable handlebar, easy access control panel and a central lifting hook.

The innovative floating grinding head with self-levelling pivot follows the floor profile, which promotes even wear of the grinding shoes. A floating dust shroud gives a tight seal, capturing harmful dust from escaping the grinding head.

Changing grinding shoes is fast and hassle-free with the Easy Lock tooling system. Compatible with the Redi Lock system, this machine comes standard with a grinding shoe adaptor plate.

This machine is ideal for small and medium domestic or commercial projects, where coating removal, levelling high spots, or general concrete grinding and surface preparation are needed.



SINGLE HEAD GRINDER



Adjustable handlebar
Reversible with 3-way height adjustment for superior ergonomics

Lifting hook
Central lifting hook for easy and safe onsite handling

Single phase electric motor
1.8 kW electric motor for use with standard 10 amp power outlet

Direct drive system
Delivers optimum grinding efficiency with full motor weight directly over the grinding head

Floating head
Self-levelling pivot follows the floor profile promoting even wear of the grinding shoes and plates

Easy operator control
Control panel positioned within easy reach for optimised control and safety

Folding handle
3 locking positions for transport and storage, changing of consumables and operation

Detachable grinding head
Quickly and easily separate the grinding head and motor from the main chassis for easier handling, transportation and storage

Easy Lock grinding shoe adaptor plate included

- Fast and hassle-free changeover of grinding shoes
- Compatible with universal Redi Lock system
- Can also be operated with 250 mm (10 inch) grinding plates

Dust management system
Equipped with dual shrouds (full seal and edge grinding), 50 mm vacuum port, and water inlet for ultimate dust control

Model	Grinding Width mm (in)	Operating Weight kg (lb)	Voltage V/Hz	Max Current A	Power Output kW	Power Output hp	Grinding Speed rpm	IP Rating	Dust Outlet mm (in)	Lifting Hook	Grinding Shoes	Power Cord Length m (ft)	Product Code
FCG-250	250 (10)	76 (167.5)	240 50/60	9.8	1.8	2.4	1400	55	50 (2)	Yes	Easy Lock (Redi Lock Compatible)	0.3 (1)	FT100601-UNIT

The FCG-250 must be used with a heavy-duty extension lead with a minimum 3 x 1.5 mm² cable which does not exceed 20 metre in length. Adaptor plate included as standard.

FLEXTOOL PLANETARY CONCRETE GRINDER

FCG-450

The Flextool Planetary Concrete Grinder FCG-450 is compact in design and delivers exceptional grinding and polishing capability. Grinding efficiency is optimised through the placement of the motor directly above the grinding head, providing extra weight during operation. Additional weight can be added by moving adjustable head weights into position.

Featuring a height-adjustable handle, easy access control panel and central lifting hook, this machine is designed with the user in mind. The fully sealed aluminium gearbox provides enhanced durability and reduced maintenance. The floating dust shroud gives a tight seal, capturing harmful dust from escaping the grinding head.

This grinder is ideal for small to medium size projects on residential or custom commercial work.



PLANETARY GRINDER



Adjustable handlebar
Reversible with 3-way height adjustment for superior ergonomics

Lifting hook
Central lifting hook for easy and safe onsite handling

Electric motor and inverter
2.2 kW electric motor and inverter system for use with standard 10 amp power outlet

Fully sealed aluminium gearbox
Provides enhanced durability and reduced maintenance (no drive belts)

Detachable grinding head
Quickly and easily separate the grinding head and motor from the main chassis for easier handling, transportation and storage

Variable speed
Allows operator to adjust grinding speed from 300 to 1800 rpm

Easy operator control
Control panel positioned within easy reach for optimised control and safety

Folding handle
3 locking positions for transport and storage, changing of consumables and operation

Adjustable grinding head weights
Two adjustable grinding head weights to increase pressure for improved grinding efficiency and performance

Dust management system
Floating dust shroud gives a tight seal, capturing harmful dust from escaping the grinding head. Fitted with 50 mm outlet for connection to vacuum system

Model	Grinding Width mm (in)	Operating Weight kg (lb)	Voltage V/Hz	Max Current A	Power Output kW	Power Output hp	Grinding Speed rpm	IP Rating	Dust Outlet mm (in)	Lifting Hook	Grinding Shoes	Power Cord Length m (ft)	Product Code
FCG-450	450 (18)	145 (320)	240 50/60	9.57	2.2	3	300 to 1800	55	50 (2)	Yes	Easy Lock (Redi-Lock Compatible)	0.3 (1)	FT100600-UNIT

The FCG-450 must be used with a heavy-duty extension lead with a minimum 3 x 1.5 mm² cable which does not exceed 20 metre in length. The FCG-450 comes standard with 9 resin adaptors.



FLEXTOOL PORTAVAC®

The Flextool PortaVac FDC-1A1P is a lightweight, highly portable dust collector engineered for smaller surface preparation tasks and edge grinding. Featuring a powerful 1200 W motor for increased airflow and a high-quality H-Class HEPA filtration system for reliable and high-performing air filtration for a wide range of projects.

Designed to capture the finest concrete and silica dust particles, the Flextool PortaVac FDC-1A1P is an auto-pulsing dust collector, using patented auto-pulsing technology for 100% uninterrupted working and no manual filter cleaning. It comes standard with a range of accessories and filters.

Ideal for edge grinding, tight workspaces, continuous tool operation, and safe onsite dust management.

Lifting handle
Central lifting handle for easy and safe onsite handling

Auto-pulsing technology

- Provides reliable and efficient continuous filter cleaning during operation and ensures 100% uninterrupted working
- No manual cleaning

38 Litre tank capacity
Portable and robust design with generous capacity for dust collecting and cleaning applications

Solid and smooth wheels with brake system

- High-quality wheels for easy manoeuvrability
- Brake system for safe, stable positioning during operation

HEPA filtration system

- Compliant with H-Class standards for optimum air filtration and capture of the finest concrete and silica dust particles
- Captures 99.97% of particles ≥ 0.3 microns

Single Ametek motor
Delivers strong, continuous suction performance

Model	Operating Weight kg (lb)	Voltage V/Hz	Motor W	Current A	Air Flow m³/h (ft³/h)	Vacuum mbar	Vacuum Hose Diameter mm (in)	Pre Filter Type	Filtration Type	Filter Cleaning	Dust Collection	Power Cord Length m (ft)	Product Code
FDC-1A1P	13.5 (29.8)	240 50/60	1 x 1200	5.2	262 (9252)	250	35 (1.4)	N/A	2 x H-Class H13	Auto- pulsing (automatic)	Bagging system (Non-continuous)	8 (26.25)	FT100500-UNIT

FLEXTOOL DUST COLLECTOR

The Flextool Dust Collector FDC-1A2 is specifically designed for the rigors of commercial and contractor use. Featuring powerful twin-motors for increased airflow, a high-quality H-Class HEPA filtration system and an efficient continuous bagging system, it provides reliable and high-performing air filtration for a wide range of projects.

The Flextool Dust Collector is a twin-motor, auto-pulsing dust collector, using patented auto-pulsing technology for 100% uninterrupted working and no manual filter cleaning. Designed to capture the finest concrete and silica dust particles, it offers exceptional performance capabilities and comes standard with a full suite of accessories.

Auto-pulsing technology

- Provides reliable and efficient continuous filter cleaning during operation and ensures 100% uninterrupted working
- No manual cleaning

Dust inlet port

- Integrated closing mechanism prevents dust escape when hose is disconnected, ensuring a cleaner and safer work environment

Continuous bagging system

- Clean and efficient management, storage and disposal of captured material

Solid and smooth wheels

- Quality wheels with brake system for easy and safe manoeuvrability



HEPA filtration system

- Compliant with H-Class standards for optimum air filtration and capture of the finest concrete and silica dust particles
 - Captures 99.99% of particles ≥ 0.3 microns

Dual Ametek motor

- Continuous high-performance operation
 - Ideal for use with grinders with a working width of up to 600 mm

Model	Operating Weight kg (lb)	Voltage V/Hz	Motor W	Current A	Air Flow m³/h (ft³/h)	Vacuum mbar	Vacuum Hose Diameter mm (in)	Pre Filter Type	Filtration Type	Filter Cleaning	Dust Collection	Power Cord Length m (ft)	Product Code
FDC-1A2	53 (116.8)	240 50/60	2 x 1200	9.6	400 (14,126)	240	50 (2)	2 x H-Class H11	2 x H-Class H13	Auto- pulsing (automatic)	Continuous drop-down bagging system	8 (26.25)	FT100463-UNIT

* FDC-1A2 previously known as FDC-1A

FLEXTOOL PORTAVAC COMPONENTS

Description	Product Code	Included with FDC-1A1P
1 FLEXTOOL PORTAVAC ALUMINIUM WAND 35 MM	FT100501-UNIT	✓
2 FLEXTOOL PORTAVAC WAND BEND 35 MM	FT100502-UNIT	✓
3 FLEXTOOL PORTAVAC FLOOR TOOL 35 MM / 300 MM	FT100503-UNIT	✓
4 FLEXTOOL PORTAVAC CREVISE NOZZLE 35 MM	FT100504-UNIT	✓
5 FLEXTOOL PORTAVAC H-CLASS FILTER BAG 5-PACK	FT100505-UNIT	✓*
6 FLEXTOOL PORTAVAC STANDARD FILTER BAG 20-PACK	FT100506-UNIT	✓*
7 FLEXTOOL PORTAVAC HEPA FILTER H-CLASS	FT100507-UNIT	✓
8 FLEXTOOL PORTAVAC CONDUCTIVE HOSE KIT 35 MM / 4 M	FT100508-UNIT	✓



FLEXTOOL DUST COLLECTOR COMPONENTS (FDC-1A2)

Description	Product Code	Included with FDC-1A2
1 FLEXTOOL DUST COLLECTOR HOSE 50 MM / 7.5 M	FT100464-UNIT	✓
2 FLEXTOOL DUST COLLECTOR ALUMINIUM WAND 50 MM	FT100465-UNIT	✓
3 FLEXTOOL DUST COLLECTOR FLOOR NOZZLE 50 MM	FT100466-UNIT	✓
4 FLEXTOOL DUST COLLECTOR REDUCER 75 MM / 50 MM	FT101803-UNIT	✓
5 FLEXTOOL DUST COLLECTOR HOSE CUFF 50 MM	FT100471-UNIT	✓
6 FLEXTOOL DUST COLLECTOR BAGGING SYSTEM 4-PACK	FT100467-UNIT	✓*
7 FLEXTOOL DUST COLLECTOR HEPA FILTER H13 (USED ON FDC-1M AND FDC-1A2)	FT100469-UNIT	✓
8 FLEXTOOL DUST COLLECTOR HEPA FILTER H11 (USED ON FDC-1A2)	FT100470-UNIT	✓
9 FLEXTOOL DUST COLLECTOR HEPA FILTER CONICAL (USED ON FDC-1M)	FT100468-UNIT	✓



Flextool®

THE HOME OF LEADING BRANDS

Flextool®

Mikasa 

SMITH
PERFORMANCE SPRAYERS

MQ WHITEMAN

W. Rose
SINCE 1708

K
KRAFT TOOL CO.
USA

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Equipment designs and specifications may be subject to change without notice.

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