



BLADETEC

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



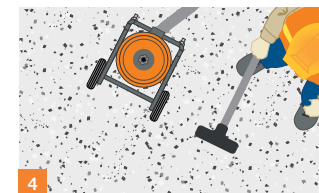
Grind the concrete using 16 grit diamond shoes to remove the top layer until the desired amount of aggregate is visible. Grind the entire area. This is usually a very time consuming process.



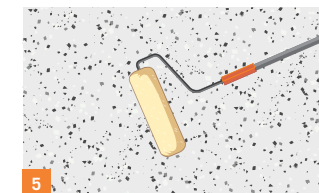
Attach 40 grit diamond shoes and grind over the entire surface again until all scratches left from the 16 grit diamond shoes are no longer visible.



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

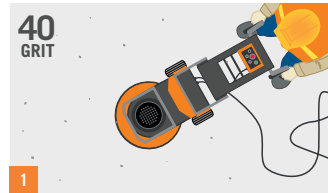
Planetary Concrete Grinder

Type of coating or application

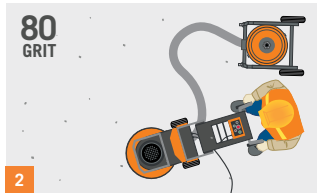
2-Pack clear coating



STEPS



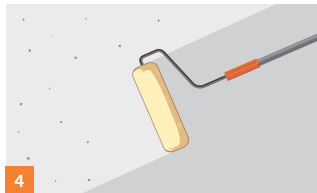
Grind the concrete using 40 grit diamond shoes to remove any imperfections on the surface. Do this until the floor is ground to a consistent level.*



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.

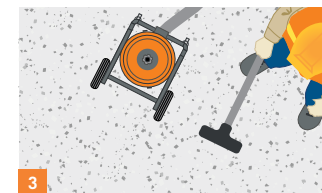
STEPS



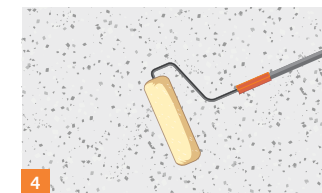
Grind the concrete using 16 grit diamond shoes to remove the top layer until the desired amount of aggregate is visible. Grind the entire area.



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

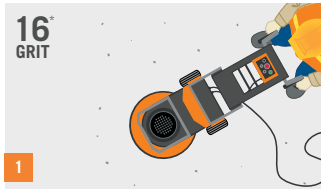
PCD* / 16 grit Arrow Segment^ / 40

Equipment

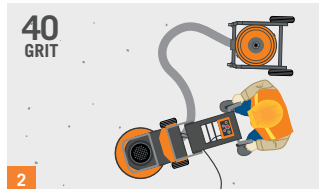
Single Head or Planetary Concrete Grinder



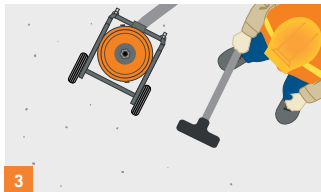
STEPS



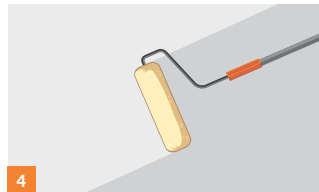
Grind the concrete using 16 grit diamond shoes to remove the top layer until the desired amount of aggregate is visible. Grind the entire area.



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.

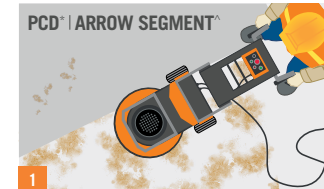


Apply the coating as per the manufacturer's instructions.

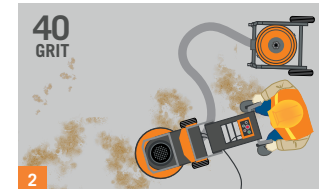
* If required - e.g. older floor, rough or damaged floor.

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 BLADETEC EASY LOCK GRINDING SHOES

The Flextool BladeTec 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 coarse 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 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

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

Lifting hook
Central lifting hook for easy and safe onsite handling

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

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

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

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

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.





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