Concrete Grinder Sales
191 Wattle Valley Rd. Camberwell Victoria 3124 Australia
P. 03 9889 4952 E. edgerbus@concretegrindersales.com W. www.concretegrindersales.com

178mm Dust shroud Q & A

Q. What are the benefits of this dust shroud?
A.1.

- **No suction stick or friction**. There is no suction stick or friction so the operator has greater control with the rigid shroud and skirt design. The floating skirt touches the floor, but produces no friction because of the air gap between the shroud and the skirt. When using a rubber hook and loop skirt the air flows through a small gap under the skirt so that the skirt does not touch the floor.
- **No dust edging**. By eliminating a large opening for edging there is no dust escape when edge grinding. When the cupwheel cuts through the floating skirt the gap is small and not enough to cancel the vacuum air flow to allow dust to escape.
- **Automatic skirt height adjustment.** The self adjusting, floating skirt automatically adjusts in height and air no longer comes in under the skirt, it enters between the body and the skirt through the hook fabric.
- **Strong, rigid shroud.** The shroud body and mounting collar are made of steel to maintain its shape and not prematurely wear out.
- **Transferable to other grinders.** Contractors need choice of grinders because nobody wants to throw away a dust shroud because the grinder fails. These dust shrouds can be swapped to all the popular grinders with the molded insert system that has multiple brand-colour-coded inserts inside a steel collar. There are also optional inserts for the main variable speed, 180mm polishers to use the 178mm dust shroud for polishing.

Q. How close will it grind to the wall?
A.1 The 178mm cupwheel will slightly touch the inside of the floating skirt which is 2mm thick so it will grind within 2mm of a wall unless the operator presses it against a wall. If a 175mm cupwheel is used the gap will be another 1.5mm.
1.2 If the operator presses against the wall the cupwheel will be forced against the skirt and will wear a section away which is quite normal. In this way the Dust Shroud will grind against the wall with no gap.
1.3 It is normal for cupwheels to have rounded edges on the outside front segments especially turbo type cupwheels. If the radius of this rounded edge is 1mm then the grinding gap to the wall may be between 1mm and zero.

Q. Will dust escape from the worn edge area of the floating skirt?
A.1 Normally dust does not escape from the worn edging area because it is not large enough to affect the vacuum air flow, however some sand or debris might be released through the opening.
1.1 Holding the shroud against a wall will prevent dust or debris from escaping
1.2 When grinding open floor areas use the cover strip to cover the opening and remove it when edge grinding.

Q. Can dust escape from the shroud
A.1 Yes, dust can escape if the vacuum dust collector air flow is too low which is not common. However dust can also escape when the shroud becomes overloaded with debris which can happen when coarse grinding soft concrete. This can be made worse with a turbo style wheel (which is normally fine) that acts like a fan to throw debris outwards. Two ways to stop this would be to use a finer grit cupwheel which reduces the amount of debris or change the cupwheel style to Arrow segment or Tearitoff both of which do not act as a centrifugal fan. This effect does not happen with normal strength concrete.

Q. How do I replace the floating skirt?
A.1 The simplest way to attach the skirt after removing the old skirt is to place it on the floor and tilt the grinding wheel and dust shroud into the front of the skirt. Then stretch the rear of the skirt to be able to lift it up over the shroud.

Q. Is the tensioner spring necessary?
A.1. Yes, it is necessary to apply downwards force to the skirt to keep it touching the floor.

Q. How do I know if the skirt is worn?
A.1. The skirt height is 40mm from new. Measure the skirt and replace when it has worn 5mm or sooner if desired.

Q. Does the dust shroud suffer from suck down?
A.1. No. It will continue to float easily because the skirt touches the floor and has little friction because it is not completely connected to the dust shroud. With a large vacuum connected the dust shroud will still move as freely as it should, but a small amount of downwards pressure on the shroud will be felt. Suck down where the shroud sticks to the floor is caused by the skirt being fully connected to the shroud with no airflow getting into the shroud. This can occur if the rubber skirt (optional) is adjusted so that it fully touches the floor.

Q. How do I increase the travel of the skirt when using a grinding wheel with large segments?
A.1. There are two possible adjustments after which a larger skirt can be purchased if they are not sufficient. The first is of course the dust skirt travel and the second is to loosen the mounting screws and slip the shroud lower down the grinding bearing housing and retighten. If that is not enough you can purchase a larger skirt (see next question).

Q. Are there different skirts available?
A.1. Yes we have three skirts: The molded plastic floating skirt 40mm high, a rubber skirt with Velcro stitched to it which is also 40mm high and a special, larger rubber and Velcro skirt 55mm high for Diamabrush wheels or large segment wheels.

Q. What spacers or fittings are used under the cupwheels?
A.1. Generally we recommend that you only use the metal washers provided. For flat or very shallow dished cupwheels you may need to use a special extended length nut with a special spacer underneath (a matched pair) to bring the wheel up higher. Normally the fittings provided by the manufacturer should not be used on the shaft under the cupwheel.

Q. What locates the cupwheel to keep it centered?
A.1. Use the round, small-diameter nut with two holes for removal to secure the cupwheel. This has an inner boss proud of the flat surface that will locate in the centre of the cupwheel so use this side against the cupwheel. Never use a centering boss fitting under the cupwheel and another on top of the cupwheel at the same time. Only use one or the other because the two centering bosses will touch each other and lock in position which will be very difficult to remove later and they will not lock the cupwheel which will be able to spin independently.

Q. Which fittings are included?
A.1. Five inserts for five grinders are included. Five steel washers are also included as spacers for under the cupwheel to adjust its height. These inserts fit 230mm grinders – Bosch, Metabo, DeWalt, Hitachi, Makita, Milwaukee and two optional inserts can be purchased for180mm polishers – Makita, Hitachi

Q. What size grinder is recommended?
A.1. The 178mm dust shroud can be fitted to 230mm and 178mm angle grinders (not recommended) and 180mm variable speed polishers. It is mainly used with 230mm angle grinders and a 178mm cupwheel which will have the correct circumferential speed at 6,500rpm. A 178mm angle grinder is not recommended because the speed of 8,000 rpm is too fast for the diamond cupwheel and the power rating is not as high as the 230mm angle grinder even though both are the same physical shape. The 178mm dust shroud is also used for polishing with a variable speed polisher.