

Technical Notes

Wet Core Bits

The Alpha® Wet Core Drill Bit is designed for drilling the faucet-mounting holes in counter tops and vanities. It can also be used to make clean rounded corners for square or rectangular sinkholes. The Alpha® Wet Core Drill Bit is very versatile and can be adapted for use in construction trades wherever holes are needed for water, gas and electrical piping, especially when natural stone or ceramic tile is already installed. The Alpha® Wet Core Drill Bit is designed to work on a drill press with a water swivel attachment or free-hand using a wet polishing tool such as the AIR-658, AWP-158 or VSP-110. Since it must be used wet, a tool with a central water-feed or a water swivel is necessary. The convenience of a portable hand polishing tool makes the Alpha® Wet Core Drill Bit very adaptable for a variety of applications. Available in 3/8", 1/2", 3/4", 1", 1-1/4", 1-3/8", 1-1/2", 2 and 2-1/2" sizes, these wet core drill bits are ideal for common faucet hole applications. The 5/8"-11 arbor is a common size found on most drills and polishing tools in the marketplace today. The direct sintered metal segments are brazed to the steel core and provide the long life and aggressiveness expected from a quality core bit. We recommend a template be used when drilling free-hand and a scrap piece of stone be clamped under the stone to prevent excessive chipping on the backside of the stone.

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Part No.	Diameter	Maximum RPM	Arbor
DCB00380	3/8"	3,500	5/8"-11 Threaded
DCB00500	1/2"	3,500	5/8"-11 Threaded
DCB00750	3/4"	3,500	5/8"-11 Threaded
DCB01000	1"	3,500	5/8"-11 Threaded
DCB01250	1-1/4"	3,500	5/8"-11 Threaded
DCB01375	1-3/8"	3,500	5/8"-11 Threaded
DCB01500	1-1/2"	3,500	5/8"-11 Threaded
DCB02000	2"	3,500	5/8"-11 Threaded
DCB02500	2-1/2"	3,500	5/8"-11 Threaded

How to Use

Attach the Alpha® Wet Core Bit onto your center water-feed polisher with a 5/8"-11 spindle.

Mark the location of holes that need to be drilled.

Use a template as a guide on the stone in order to avoid any mistakes during drilling process.

Clamp a piece of stone scrap under the stone being core drilled to prevent excessive chipping or "blowout" on the back side of the stone.

Proceed with drilling, pressing steadily until the wet core bit drills through the stone.

Refer to the owner's manual of the tool for proper attachment and usage.

Frequently Asked Questions (FAQs)

What materials can be core drilled using the Alpha® Wet Core Bits?

The Alpha® Wet Core Bits are designed to be used on granite, engineered stone, porcelain slab, marble, limestone, ceramic tiles, concrete and gypsum.

Can I use the Alpha® Wet Core Bit dry?

No. Alpha® Wet Core Bits are designed for wet use only! Water is required to keep the diamond segments cool during the drilling process; if no water is used, the segments will glaze and the cutting ability of the core bit will stop. If your application calls for dry core drilling, please use the Alpha® Dry Core Bit series designed for dry applications on high-speed grinders.

What rpm range should the Alpha® Wet Core Bits be used?

These wet core bits should not exceed 3,500 RPM.

Can I use the Alpha® Wet Core bits on electric and pneumatic polishers?

Yes. We highly recommend using the Alpha® Wet Core Bits on our electric and pneumatic polishers such as: AWP-158, VSP-110 and AIR-658.

Can I use the Alpha® Wet Core Bits on my high-speed variable grinder with outside water feed?

No. Alpha® recommends using our wet core drill bits on polishers with central water-feed systems to assure proper lubrication of the core bits. High-speed angle grinders with variable speed do not have a central water-feed supply, so the core bit will not receive proper coolant to the diamond segments.

What is the thread size of the Alpha® Wet Core Bits?

The thread size is 5/8"-11.

What kind of template should be used?

The template can be any type of material such as granite 3/8" tile, scrap of engineered stone or granite slab (narrow stock such as 2cm) or composite material. The template should be made by the same operator to assure accuracy. Secure the template to the stone by clamping it with the polished side facing the polished work piece to avoid possible scratching. Your template should act as a guide for the bit.

Can I use Alpha® Core Drill Bits on a drill press with a water swivel attachment?

Alpha® Core Drill Bits can be used on water swivel attachments, but caution should be taken to allow the diamonds to work properly. Because of the extra length added to the bit by the water swivel attachment, excessive pressure can damage the bit.

What applications are the Alpha® Wet Core Bits designed for?

Our core bits are designed for drilling faucet-mounting holes in counter tops and vanities. They can also be used to clean rounded corners for square or rectangular sinkholes. They are ideal for construction trades wherever holes are needed for water, gas and electrical piping.

What stone thickness can I drill through using an Alpha® Wet Core Bit?

Alpha® Wet Core Bits are 4" in length; this would be the maximum thickness they can drill through when they are new.

What is the purpose of the diamonds on the side of the core?

When you drill a hole manually, you are exposed to the risk of undercut due to the unstable drilling condition as compared to using a drill press. To avoid such wear on the steel core, we attached diamond grits on the side of core bit using Vacuum Brazing Technology. The combination of sintered segment and undercut protection will make your drilling application easier and more stable.

What is the life expectancy of the Alpha® Wet Core Bits?

Each size of the wet core bits will have its own individual life expectancy due to the size of the diamond segments and material they are core drilling. The 1-3/8" and 1-1/4" core drill bits were tested by the Research & Development Division of Alpha® and they recorded over 350 core drill holes through various types of 1-1/4" (3cm) granite slabs.

What sizes of Wet Core Bits are available from Alpha®?

See chart on Page 1.

Helpful Hints

- When you drill a hole freehand, it's better to rock the power tool in a circular motion. Doing so will enlarge the size of the hole and maintain good cutting action of the diamond segments.
- Sometimes the stone plug remains stuck inside the core bit. To remove it, tap onto the core bit, while it is mounted on the tool, with a wrench.
- Do not leave your core bit installed on your tool for long periods of inactivity. Remove it from the tool after each use. Water can rust the metal parts on both the tool and the bit, making it difficult to remove it later on.
- Use of a template is suggested to avoid mishaps of freehand core drilling.

Reference

For more product information, visit us on the web at www.alpha-tools.com.