

Technical Notes

Dry Core Bits

Alpha Professional Tools® introduces a Dry Core Bit designed for use on the job site without using water. Our Dry Core Bits fit on a high-speed angle grinder with a 5/8"-11 spindle. The Alpha® Dry Core Bit provides the best cutting performance and can drill through the toughest 1-1/4" granite or engineered stone countertop at the job site without using water. Not only is this convenient but it also increases productivity by cutting down on the amount of clean up needed when using water. Available in 1/2", 3/4", 1", 1-1/4", 1-3/8", 1-1/2" and 2" sizes. Choose the Alpha® Dry Core Drill Bit where the convenience of dry application is essential.

Sections:

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Part No.	Diameter	Maximum RPM	Arbor
DRB00500	1/2"	12,000	5/8"-11 Threaded
DRB00750	3/4"	12,000	5/8"-11 Threaded
DRB01000	1"	12,000	5/8"-11 Threaded
DRB01250	1-1/4"	12,000	5/8"-11 Threaded
DRB01375	1-3/8"	12,000	5/8"-11 Threaded
DRB01500	1-1/2"	12,000	5/8"-11 Threaded
DRB02000	2"	12,000	5/8"-11 Threaded

How to Use

Attach the Alpha® Dry Core Bit onto your high-speed angle grinder by threading it onto the 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 dry core bit drills through the stone.

When drilling multiple holes, cool off the dry core bit by dipping it in cool water after each drilled hole.

Frequently Asked Questions (FAQs)

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

The Alpha® Dry Core Bits are designed to be used on granite, engineered stone and porcelain slab materials.

Can I use the Alpha® Dry Core Bits on marble?

No. Marble is too soft and the heat created from dry core drill may crack the material.

Can I use the Alpha® Dry Core Bit wet?

Yes. Although these core bits are designed for dry use, wet cutting is recommended whenever possible. When core drilling within residential homes, the dry application is highly recommended; this will save time and money for time consuming clean-ups of the residence. Yes. Although these core bits are designed for dry use, wet cutting is recommended whenever possible. When core drilling within residential homes, the dry application is highly recommended; this will save time and money for time consuming clean-ups of the residence.

What is the main advantage of using dry core bits over wet core bits?

Alpha® realized that many customers wanted to use wet core drills without water on the job site. When an installer has to make an additional hole or two, they can not use water since the stone is already installed and using water will be difficult and costly due to the time consuming clean-up.

What is the maximum rpm at which I can use the Alpha® Dry Core Bits?

You should not exceed 12,000rpms when using these dry core bits.

What is the lowest rpm at which I can use the Alpha® Dry Core Bits?

The core bits should not be used at any speed lower than 6,000 RPM.

Can I use the Alpha® Dry Core Bits on my wet polisher?

No. The rpms of polishers are too low. Usually polishers run about 2,000 – 4,000rpms.

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.

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

Alpha® Dry 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 Brazed Technology. The combination of sintered segment and undercut protection will make your drilling application easier and more stable.

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

See chart on Page 1.

Helpful Hints

- Place a piece of flat stone underneath the stone to be drilled in order to avoid blowout of the bottom of the hole.
- 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's 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.