



Tungsten carbide hole saws

Instructions

How to make a cut with the Tungsten Carbide Hole Saw products.

- -All materials have a hardness rating so this is important to keep in mind when it comes time for cutting
- -Always keep any cut, and Hole Saw well lubricated.
- -Always do a test cut on the material that you wish to cut.

Use a sound cutting base eg: thin rubber mat on a piece of timber or a piece of timber (plywood).

Ensure the timber is thick enough to ensure the guide drill bit does not penetrate all the way through so as to avoid damage to the tip.

Mark out the material you wish to cut—we do suggest that you use a permanent marker so you don't loose your lines and we find the best way is to place the hole saw on the material and then mark the tip where the guide drill bit will penetrate. Remove the bit and use a tape measure to check your hole saw is the correct size and in the correct location prior to commencing cutting.

You can also use a template as a guide placing it over the top of the material. Secure this, sure you have your Lubricant bottle (oil based for metals—water for ceramic or stainless steel) on hand to flood the area that you will be cutting. You can start your drill at low speed. Keep this lubricated at all times. Take your time and let the Tungsten do the work. If you feel this bit bite, you may have too

much pressure on this or not enough lubrication. When both are right you feel confident with it. Repeat this over and over.

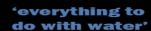
Now for the more confident.

Always place the material on a non slip material or on a clean non– slip surface eg: rubber mat or ply are OK. After marking out the area you wish to cut you can build a dam around the area you marked out. We use Blu-Tack for this purpose. You then fill this area with lubricant or cutting fluid.

Ok Now start the drill at medium speed. Approach your mark with the drill bit vertical, when the pilot hole is through adjust the hole saw at an angle of 30 to 45 deg. Start cutting the surface until you create a C shape. As this gains start to bring your drill to the upright position and continue cutting. You can stop at any time to allow water to fill the cut. This will help keep the Tungsten Carbide Hole Saws cool. You can repeat this over and over—take your time. When coming close to the end of the cut, back off the pressure and increase the speed. This will give a cleaner exit.











When cutting Ceramic or Stone tiles We use a 6mm Diamond Hole Saw to make the pilot hole so as to not damage the drill bit: refer to the Diamond hole Saw instructions sheet for the correct use of these.

Be sure you clean out your drill bit after every cut. We use a 3 inch nail or a very fine screw driver. Push through the centre hole of the bit or the side holes.

*Note: If this is not removed you will not be able to drill a second hole. You will also damage the bit..

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The Tungsten Carbide Hole Saw product range: Are rated for:

2.	Mild Steel	Ł
3.	Aluminum	Ε
4.	Non Ferrous Metals	Ε
5.	Ceramic Tiles	G
6.	Porcelain / Vitrified Tiles	Ok
7.	Fiberglass	Е
8.	Perspex Acrylic	Ε
9.	Plaster	Е
10.	Limestone / Slate	G
11.	Stone / Quartz	Ok
12.	Terracotta	G
13.	Marble	G
14.	Granite	Ok
15.	Compressed fibro sheeting / Masonry	G
E– Excellent G– Good OK– Will cut but slow		

The Tungsten Carbide Hole Saw product range: Are not recommended for:

1. Hammer drill

1. Stainless Steel

- 2. High Speed
- 3. Excessive force / Pressure
- 4. Tempered glass
- 5. Dry cutting

Dry cutting, high speeds and excessive force/ pressure can reduce the life of The Tungsten Carbide Hole Saws





Lubrication is most important!

Keep the Tungsten Carbide Hole Saw products well lubricated, you can use: Oil based or petroleum based products for all Metal Cutting When Cutting ceramics or non metal based products you can use:

- -Water
- -Water with 10% detergent
- -Water based gel—great for wall drilling or use a spray bottle. Do not use petroleum based products on Non Metal Products

PLEASE NOTE Safety is most important to All!! This is now in your hands.

- 1. Safety glasses
- 2. Ear protection
- 3. Dust mask
- 4. Template

