# **Buying or Renting**

# How to choose the best one for the job

BY TOM MEEHAN

hen I started my tile company in the 1970s, I spent \$800 on a heavyduty tub-style tile saw. It wasn't flashy and didn't have any bells and whistles, but it was the best tool at the time. Thirty years later, prices haven't risen all that much, but the options are incredible. There are saws that run smoothly enough to make clean cuts in glass tile and others that are powerful enough to bulldoze through miles of granite without popping a circuit breaker. Some tile saws excel at accurate bevel cuts, and others are indispensable for making plunge cuts or creating curves.

The fact is that there are a number of well-made, modern tile saws that allow inexperienced tilesetters to complete projects that took old-timers years to perfect. But the trouble with any market that becomes flooded with options is more difficulty in making the best choice. You can ask the clerk behind the rental desk at the local home center which saw is right for your project, but chances are that the clerk's insights reach only as far as the saw or saws in stock.

I have been in the tile business for more than half my life, have always had three or four installers on my crew, have owned more than 25 saws, and have tried countless others. The following questions and answers cover what I think are the most important features and differences in modern tile saws. Of course, no single saw does everything perfectly, but knowing the saws' strengths and weaknesses makes it easier when choosing the right one for your next project.

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CUT CAREFULLY: In 30 years of installing tile, I've never seen anybody cut by a tile-saw blade, but that doesn't mean it can't happen. Treat these tools with the same caution as you would any power tool, and make sure to wear safety glasses to protect against flying tile chips.





Do I need a tile saw at all, or can I do the job with a score-andsnap tile cutter?

#### I use a snap cutter as often as possible.

They are inexpensive, quick, clean, quiet, and dry. My favorite ones are made by Superior Tile Cutters. The trouble



is that this type of tool doesn't work with all varieties of tile—it is best suited for ceramics—and it can make only continuous straight cuts. You'll need a wet saw any time you have to cut around electrical outlets, vent registers, and plumbing penetrations.

I want to tile the floor in my master bathroom with granite tiles set in a diagonal nattern. Can the necessary cuts be made on any wet saw?

Granite is one of the hardest tiles, and a diagonal pattern means that every tile on the perimeter of the room needs to be cut in half. Most wet saws can muscle through hard tile, but models with small motors will bog down, have you running back and forth to reset popped circuit breakers, and burn out prematurely. Look for a saw that has a motor with at least 1½ hp (continuous, not peak). My choice for a full day of hard cutting of big tiles is the Husqvarna TS 250.

Tile size matters, too. Although granite tiles are typically 12x12 or smaller, many saws aren't large enough to handle 18x18 or 24x24 tiles cut on the diagonal. Read the specs before you buy, or bring in a piece of tile when you go to rent a saw.



# I want to finish my kitchen backsplash with 6x6 ceramic tiles. What's a good saw for cutting tiles to fit around electrical outlets and switches?

Tricky cuts sometimes can be minimized through careful layout, but often, a tile needs to be cut into a U-shaped piece—also referred to as a "pair of pants"—to fit around an electrical box or other obstacle.

In these cases, I often lift the tile into the blade; larger-diameter

blades are helpful here. Remember, only half of the blade is exposed, which means you have less than 3½ in. of working room with a 7-in. blade. Larger machines have a 10-in. blade, thus more room for your hands and for the tilted tile. The Husqvarna TS 250 has excellent working room around the blade and is one of the best saws for this task.

If you aren't comfortable lifting the tile into the blade—and to be honest, only a professional should be comfortable doing this—I suggest that you mark the cut on the back side of the tile and cut past the intended line. The curve of the blade will leave you with a clean cut on the front side. Don't worry if it's not perfect; the edges of the cut will be covered by the outlet cover plate.





## Choosing blades: Some diamonds aren't forever

UNLIKE WOOD-CUTTING BLADES, which have teeth, tile-cutting blades work using friction. Because friction creates heat and heat kills blades, these saws use water to keep the blade cool and the cut clean. It's also worth noting that a tile saw should never be used to make even one quick cut on a piece of wood. Harmless as it might seem, this will ruin the tile blade.

There are at least 20 different varieties of tile-saw blades, but you need to know about only three or four. The most important thing is to buy a quality blade because many companies sell less expensive blades that skimp on the number and quality of diamonds. (Tile-saw blades appear smooth; tiny embedded diamonds do the cutting.) You can't tell the difference in the blade's appearance, but you can in how it works and in how long it will last.

I buy blades either from MK or Felk ("Sources," p. 37). The prices are high, but if the blades are treated right and used under a constant water flow, they should last for more than a year even with frequent use. The prices and model numbers here represent 10-in. blades from Felker.

#### **GENERAL PURPOSE**

The TM-2 is a good choice for fast, clean cuts on soft to medium tile and stone. At \$140, it's pricey, but that's because it's intended for professional use and has unmatched longevity. If long life isn't a primary concern, I recommend the K-1000, which sells for about \$75, has a slightly narrower diamond ring, but doesn't sacrifice much in terms of cutting performance.

#### HARD MATERIALS

If your tilework involves porcelain, quarry tile, or any other especially dense material known to chew through ordinary diamond blades, the TM-7 is your best bet. This \$85 blade makes quick work of the hardest of hard tiles, but still leaves clean, chip-free edges.

#### **GLASS**

If you want to eliminate the chips and chatter marks common when cutting glass tile, the GB-10 is your salvation. The blade sells for \$130, but when you add up the cost of all the expensive glass tiles that are ruined with less expensive blades, it's not a bad deal.

My local home center has compact wet saws that cost about \$100. Why should I pay more?

# Whatever you do, don't waste money

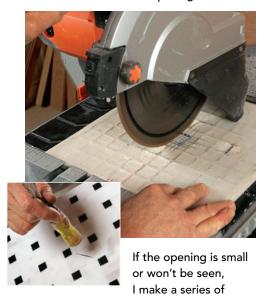
on a throwaway tile saw. If you choose an inexpensive tile saw made with almost all plastic parts, an underpowered motor, and a cheap water pump, you will be disappointed with the cutting performance. Hard porcelain and granite destroy those weak machines, and a weak machine can destroy fragile marble or glass tile.

If it comes down to price or if you do only a few tile jobs a year, I recommend renting a good tile saw instead. The rental fee of \$40 to \$60 a day is reasonable, eliminates the worry of where to store a tool that is used only occasionally, and allows you to choose the type of saw you rent based on the type of job.



I have to make holes in the center of several tiles for electrical outlets. Can I use a wet saw to make these cuts?

Yes. The safest way to make a cut in the center of a tile is by using a tile saw such as the DeWalt D24000 or the Ridgid R4010 with a plunge function, which allows the sawblade to be lowered into the tile. Just as with U-shaped cuts (facing page), plunge cuts should be made from the back of the saw, and you should account for the curve of the blade. If the desired cut must be straight and neat—which is the case for an electrical outlet—I trace it and make one cut for each side of the opening.



plunge cuts from the back side, stopping just shy of the face of the tile. After I've made several cuts in each direction, I tap the front side of the tile with the end of a chisel to create the opening.



The tile wainscot in my bathroom will be capped with a tile chair rail. How do I make the inside and outside miter cuts?

Although these cuts are 45° miters, the easiest way to cut them accurately is with a saw that has a bevel function—basically a tilting head. Unlike modern woodcutting miter saws, the heads of wet saws tilt only in one direction, so the tile needs to be spun end for end when making matched inside and outside cuts. Again, a large-diameter blade makes it a bit easier to keep your hands firmly positioned during these cuts. This bevel function also comes in handy on scenic tiles such as the ones shown below, that need to turn a corner without an interruption in the artwork. My two favorite saws for making these cuts are the DeWalt D24000 and the MK TX-3.





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I want to do something special by incorporating curves and inlays in my tilework. Can this work be done with a standard wet saw?

Simple curves can be done with the help of a standard wet saw, a pair of tile nippers, and some quick touch-up with a grinder/polisher. Anything more complicated than that requires a specialized tool called a ring saw, which is a cross between a tile saw and a bandsaw. The advantages of a ring saw are that the cuts are smooth, accurate, and usually accomplished successfully on the first tile, which reduces aggravation and waste.





Learning curves. Ring-blade tile saws can make cuts that would be very difficult or impossible with a conventional wet saw. Large tiles such as the one shown above might need to be cut from both directions.



I'm tiling the floor in my kitchen this winter, and I don't want to work outside in the cold. Is a wet saw OK to use indoors?

Unlike cutting wood inside, dust isn't a concern when cutting tiles, but water is. It's hard to look at a wet saw and judge whether it will keep water contained or drench everything in a 5-ft. radius. Most models have a small rubber flap on the back of the blade hood that is supposed to prevent water from spinning off the blade; I often supplement these flaps with a larger piece of tile membrane (inset photo below).

The other concern is water running off the edges of the cutting table, particularly a problem when cutting large tiles that hang over the edges. Some wet saws—DeWalt's

D24000 and Ridgid's R4010, for instance—have sloped trays to collect overspray and direct it back toward the water reservoir. The trade-off here is a much larger setup. The MK TX-3 (photo right), which uses a misting system, is also a drier alternative.

Noise is also a consideration in confined indoor setups. Tile saws with belt-driven motors run much more quietly than tile saws with direct-drive motors. The Husqvarna TS 250 and the Felker FTS-150 are excellent choices.





When I am cutting small glass or mosaic tiles, the little pieces fall into the ½-in.-wide channel in my tile saw's cutting

table. Is there a better way to control these small pieces?

#### You can get around this problem

in two ways. One is to make cuts to small tiles before cutting them free of the rest of the sheet (photo right). If they are not part of a larger sheet, make a zero-clearance cutting plat-



form (photo left). To do this, cut three-fourths of the way through a piece of 12x12 tile, then set this piece of tile on the wet saw's cutting platform. The cutting groove is the same width as the wet-saw blade, and I can use a Speed Square or another piece of tile to keep the small pieces square when sliding the table to make cuts. If you don't want to bother with jigs, consider the Gemini Revolution, which has a zero-clearance throat insert (photo above).

## If I could have only one, I'd pick two

IN SOME WAYS, A WET SAW IS A WET SAW. All but the obscure specialty saws use diamond-coated circular sawblades cooled by water that is either held below the blade or pumped from a reservoir.

But of all the saws I've borrowed, bought, or been given, the DeWalt D24000 is my favorite. This is the wet saw that tile installers have been waiting for. Not only does it cut perfect miters in any kind of raised trim pieces, but the 1½-hp motor muscles through heavy-duty straight cuts, too. The saw weighs only 69 lb., and the stand adjusts to four different working heights.

A pair of adjustable water nozzles—one on each side of the blade—let me put water where I need it for different cutting tasks. The saw is big, but that's a small price to pay for water overspray guards and collection trays that almost eliminate the need for tarps.

There are times when a large saw is overkill, so I keep an MK-170 in my van, too. It's not on par with saws that have sliding tables, but it's a good ace up my sleeve.

DeWalt D24000

MK Diamond MK-170

#### DeWalt D24000

www.dewalt.com Purchase price: \$1150

#### Felker FTS-150

www.felkersaws.com Purchase price: \$600

#### **Gemini Revolution XT**

www.geminisaw.com
Purchase price: \$1100

#### **Husqvarna Tilematic TS 250**

http://us.husqvarnacp.com Purchase price: \$1100

## SOURCES —

www.mkdiamond.com

**MK Diamond** 

MK-170 Purchase price: \$150

MK-370 Purchase price: \$350

MK TX-3 Purchase price: \$1000

#### Ridgid R4010

www.ridgid.com
Purchase price: \$700

#### **Superior Tile Cutter**

www.krafttool.com

Purchase price: \$35 to \$120

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