Gmaxx TCT Crosscut Blade (2400.100A40)

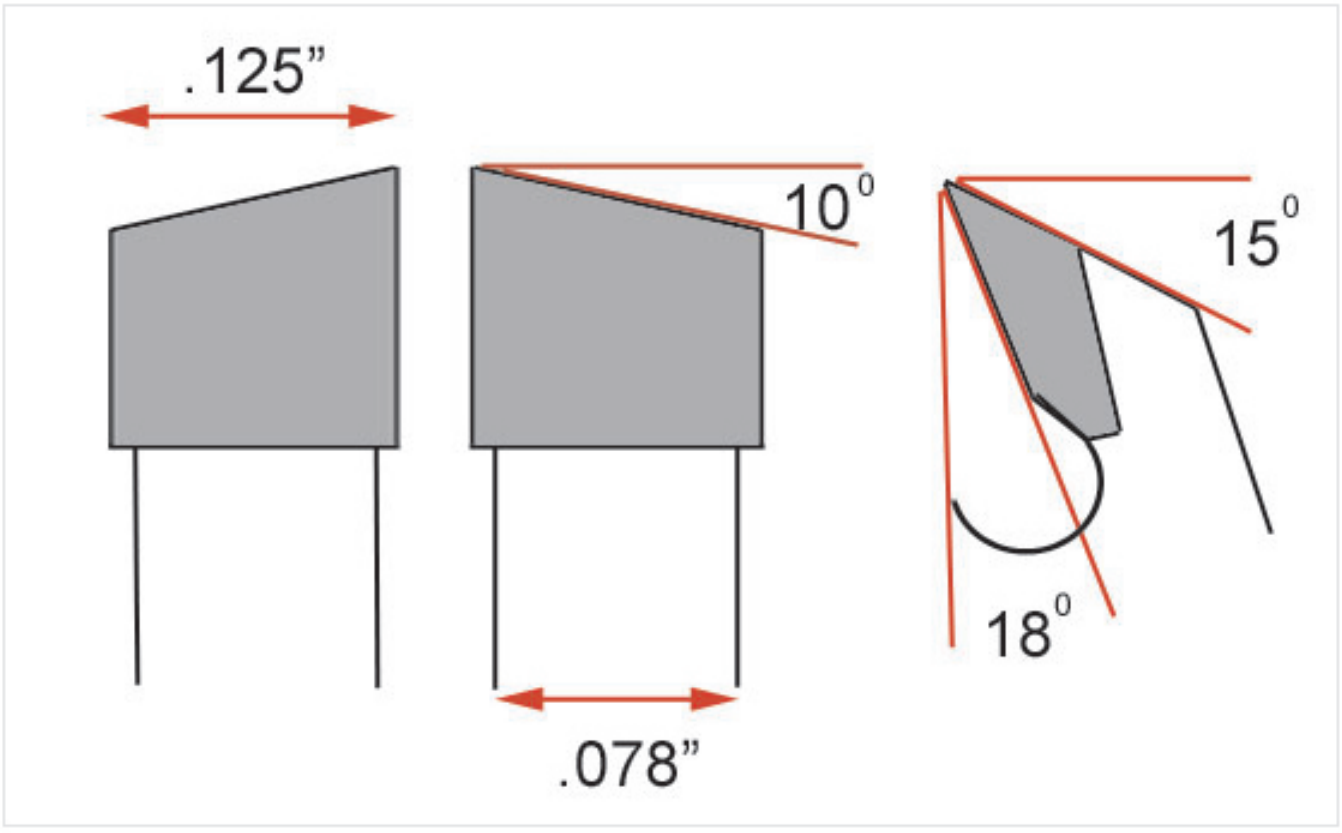
Guhdo is a German manufacturer that has been producing cutting tools since 1908. The company is owned by the Dimar Group, and their products are available in the USA through Ghudo USA and in Canada through Dimar Canada.

Gmaxx is the name of a new line of cutting tools manufactured by Guhdo. Gmaxx saw blades are differentiated from other blades by a new electrostatically applied coating that is thinner, stronger and more uniform over the body of the blade. Additionally, the blades are manufactured using a proprietary grinding process for producing precision-balanced blade bodies.

What makes Gmaxx blades different from other blades on the market is the unique blade coating process they use, what Dimar calls 'D-Coat Nano Technology'. This process electrostatically embeds the coating into the plate and the teeth, ensuring that it won't peel off or crack under normal usage. The company claims that this coating will last the lifetime of the blade, and that it's easily cleaned with water and detergent - no need for special blade cleaners.

Currently there are 68 Gmaxx blades available from 7-1/4" to 14", along with 120mm scoring blades. You can choose among 5 crosscut blades from 7-1/4" (with 24 teeth) to 14" (44 teeth). I shop tested a **Gmaxx TCT Crosscut Blade (2400.100A40)** 40 tooth blade (note: 'TCT' refers to Tungsten Carbide Teeth).

I used the Gmaxx over a six week period, mounted on a 10" 3hp Unisaw - without the use of a blade stiffener - cutting a range of shop materials, primarily cabinet grade plywood, hardwood, and some melamine.

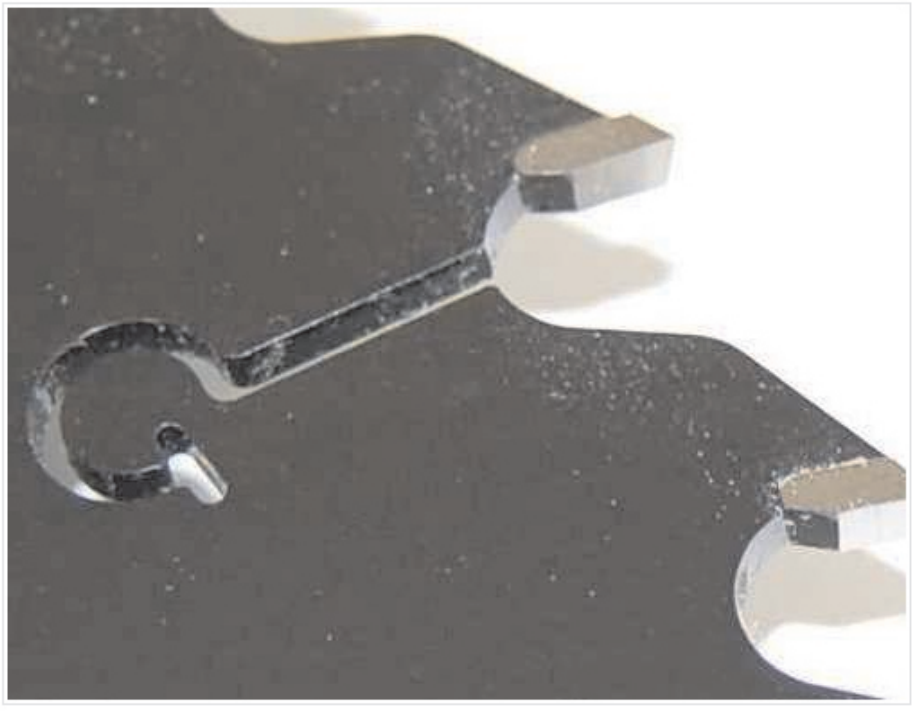


ATB teeth with a 15° top clearance, 10° top bevel, and 18° face hook

This is a standard width blade with an accurately sized and formed 5/8" arbor hole, producing a .125" (1/8") kerf. The laser cut precision balanced plate is .078" (5/64") thick and has a series of four noise-reduction expansion slots along the perimeter. The whole blade, right up to the teeth, is electrostatically coated.

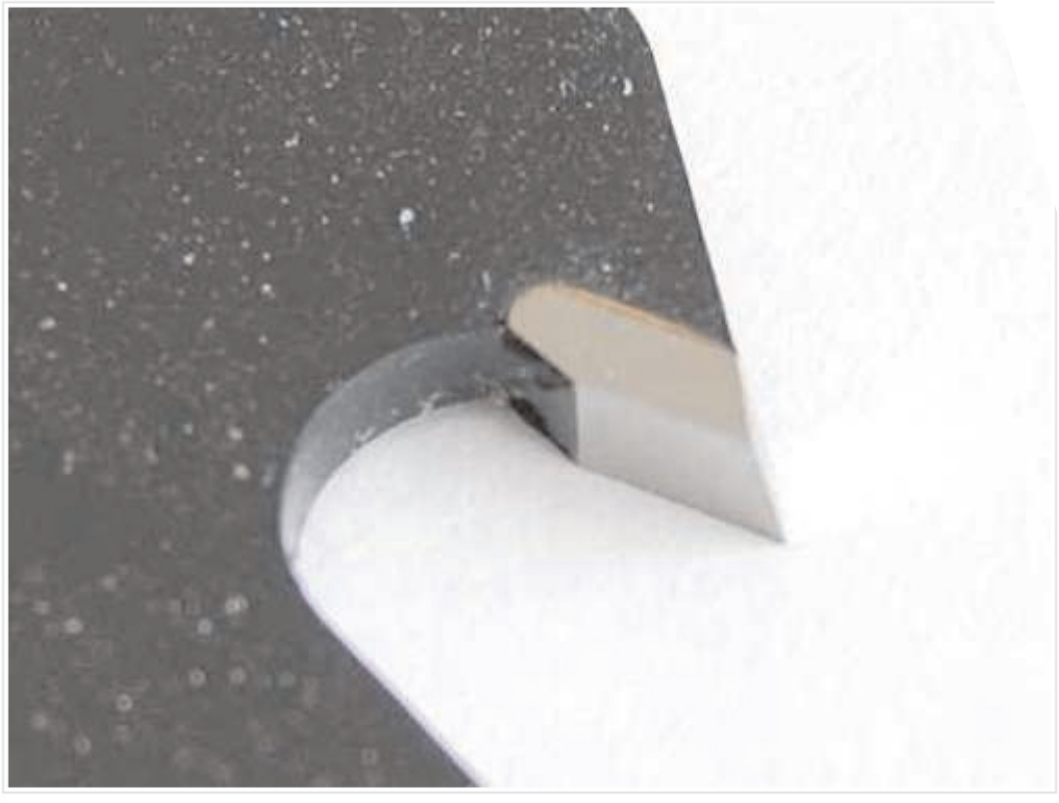
Laser cut precision balanced plate

As you'll find on a lot of crosscut blades, the Gmaxx teeth are ground in an Alternate Top Bevel (ATB) pattern - two symmetrical teeth with a 15° top clearance angle, 10° top bevel angle, and an 18° face hook (or rake) angle. This tooth configuration does give a smooth finish when crosscutting solid woods and veneered plywood because of the knife-like edges on the beveled teeth. When cutting grooves or tenons this configuration does produce a V-groove on the base of the cut - because the blade doesn't have a flat top ground tooth as found on ATB-R blades (which have a flat top 'raker' tooth following two pairs of ATB teeth).



One of the four noise-reduction expansion slots

The top bevel angle on the Gmaxx did an excellent job on hardwood, but I felt that a steeper bevel, around 15°, would have done a slightly better job on melamine (as you'll see in the photos below). On a 3 HP saw the 18° face hook gives an aggressive cut that helps the blade plow through thick material without the need to slow your feed rate. On a lower powered saw you'll likely want to slow down the feed rate somewhat.

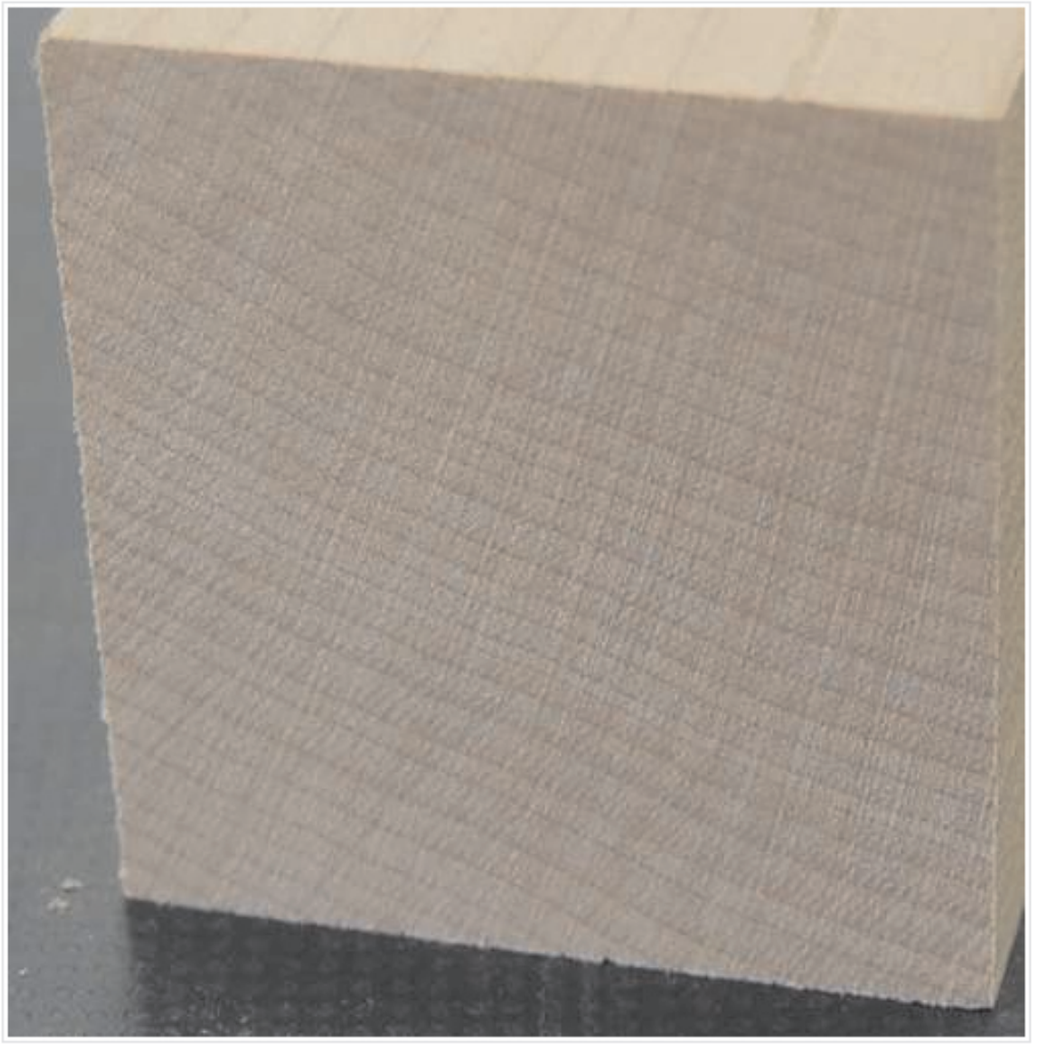


Highly polished micrograin C4 carbide teeth

Just about all high quality blades today use C4 carbide for the teeth, as it stays sharper longer. Not all blade manufacturers make their own carbide teeth. Dimar uses carbide made by Ceratizit, one of the worlds' largest producers of specialty tungsten carbide cutting tools. Companies that make teeth will have their own carbide recipe - generally, better teeth will be made of micrograin carbide powder and have some titanium added to the binder, for better edge retention.

The teeth are, after all, the most important part of any blade, and the higher the quality of the teeth, the more run time you'll have before needing to resharpen, and the more times you'll be able to have the blade sharpened. Both of these factors will affect your return on investment. According to Dimar you should be able to sharpen a Gmaxx blade an average of 15 times.

The teeth on the Gmaxx are about 17/64" long overall, and they are very cleanly brazed onto the plate with no visible gaps or porosity. While you can't see it in the photo, the face of the teeth are polished to a mirror finish - you can virtually see your own reflection.



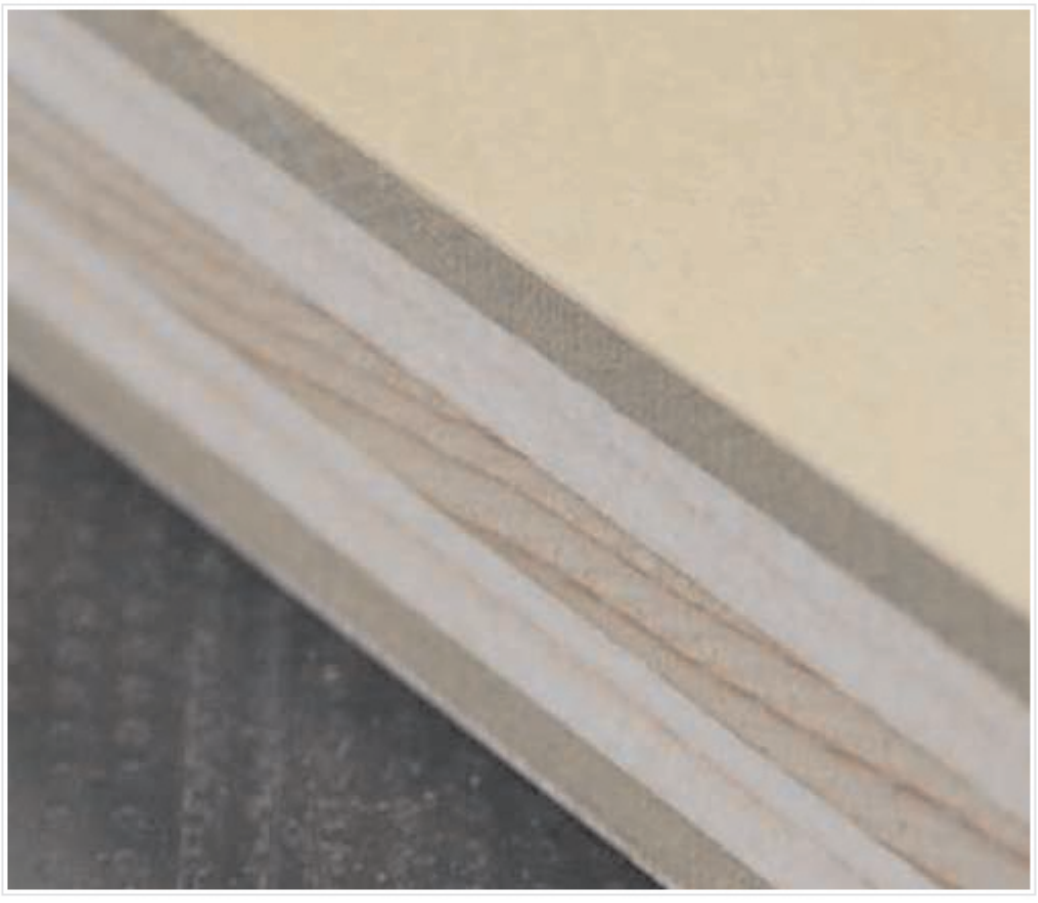
Very clean cuts in hardwood - 2" maple shown

In general I was very pleased with the quality of the cuts made by the Gmaxx. In general I kept the blade about 1/4" above the stock when cutting sheet goods, and 1" above the stock when cutting hardwood. I also use a zero clearance insert on my saw.

Crosscuts in hardwood were very clean - not quite as smooth as I was able to get with the Forrest Woodworker II blade, but entirely acceptable.

Crisp, clean rip cuts - 1-1/2" oak shown

Rip cuts were consistently excellent so that I could go straight to glue-up, or take a single finishing stoke with a hand plane on surfaces that were to be exposed.



Crisp, clean edges on plywood - top and bottom sides

As you see in the photo above, the Gmaxx did an excellent job on plywood. With a zero clearance insert on the saw, there was virtually no tear out on either side. I had the same result with veneered panels, regardless of the substrate used - plywood, MDF or solid wood.

Clean top edge on melamine (top photo), some chip out on the bottom side (bottom photo)

I rarely use melamine but did cut some stock to see how the Gmaxx performed. There was no chipping on the top side of melamine, but some minor chipping on the bottom side. One reason why there is chip out on the melamine and not on plywood is because the melamine resin covering is very brittle. For someone like me who only uses melamine ocassionally, the minor chipping wouldn't be a issue. However, for processing a lot of melamine I would opt for an ATB blade with a higher top bevel angle, or an TCG (triple chip grind) blade.

The Gmaxx has a retail price of around $80, but a street price closer to $45, which makes it exceptionally competitive. As far as I can tell, the electrostatic coating is the real deal. After six weeks of shop use the blade looks almost as fresh as the day it was first installed, and the teeth still cut very cleanly. Great quality and excellent value in a general purpose shop blade.