BOB'S CORNER
TIPS, INSIGHTS & USEFUL INFO

DIATRIM

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HOW FAST IS TOO FAST?

There is a common misconception that the faster the air/electric saw turns, the better performance will be achieved from the diamond saw blade. The most productive speeds for most diamond blades should not exceed 10,000 surface feet per minute (SFPM). For example, a 3" blade turning at 10,000 SFPM would be operating on a tool with a spindle speed of 12,500 RPM.

If blade life is unimportant and you wish to trim your parts at a faster rate, then mount them on a 20,000 RPM tool. However, you should expect to shorten the blade life considerably. Higher tool speeds can double the heat build up on the nickel metal holding the diamonds on the blade and force the nickel to release the diamonds prematurely.

30-SE50 — High Speed Router

This causes the cutting surfaces to glaze over and turn blue/black from the heat build up. Blades that reach this stage can also warp from the heat generated. If in doubt about the speed required for your particular size or type of diamond blades, routers, holesaws, etc., please call us for our recommendations.