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Tooling

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| **Across**  **2.** The type of borring bit used on the CNC.  **3.** A carbide CNC bit that direct the cutting forces to the center of the workpiece from both sides of the piece, leaving both sides with clean edges.  **4.** a gold or orange brad point boring bit rotates\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  **10.** A black brad point boring bit rotates\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  **13.** 2 knives on the same head must weigh the same to ensure the tool is \_\_\_\_\_\_\_\_\_\_\_\_\_\_..  **16.** Tool diameter affects knife mark depth, The greater the \_\_\_\_\_\_\_\_\_\_\_\_\_head , the shallower the knife mark depth.  **18.** The cutting of one piece into 2 or more pieces is called?  **19.** To increase KMPI you must increase the spindle RPM, Increase the # of knives and \_\_\_\_\_\_\_\_the feed rate.  **21.** wear resistance has to do with 2 things, 1 is hardness the other is?  **25.** Tooling that is not good for heavy workloads but used when quick and accurate change overs are necessary.  **28.** What is the example for hard but not tough?  **29.** Sawblade required when primarily cutting against the grain.  **30.** On circular saw blades, what does the abbreviation TCG stand for?  **32.** Cutting with the rotation of the bit.  **33.** The space left when grooving a piece of material.  **34.** What is the example for tough but not havd? | **Down**  **1.** Router and boring bits have \_\_\_\_\_\_\_\_\_\_\_\_ speed (rpm) limits.  **5.** On circular saw blades, what does the abbreviation ATB stand for?  **6.** A carbide CNC bit that has a spiral that directs cutting forces toward the workpiece from the top side  **7.** \_\_\_\_\_\_cutting tools are very resistant to corrosion.  **8.** On a sawblade, is used for heat control  **9.** There are three categories of wood machining. Sawing, Boring and...  **11.** Shallow dents or depressions in the surface caused by inadequate dust extraction are?  **12.** The drilling of a hole into or through material  **14.** Sawblade required when primarily cutting with the grain.  **15.** Hardwoods require a \_\_\_\_\_\_\_\_\_\_ rake angle than softwoods  **17.** The S4Sing of material into a certain thickness and width  **20.** The most dangerous part on a cutterhead as it rotates because it cannot be seen.  **22.** A tool material that is brittle is likely to be...  **23.** A large, thick washer used to reinforce a saw blade is called a  **24.** What type of blade is used on a radial arm saw for safety reasons?  **26.** \_\_\_\_\_\_\_\_\_\_-tipped tools are capable of very heavy workloads.  **27.** A carbide CNC bit that has a spiral that cuts/shears toward the tool holder.  **31.** On a saw blade that is used for chip extraction |