



## Revolutions per minute (Rotary)

Diameter	Hard Material c. 450 Brinell	
	RPM (No Load) Based on 8.0 m/min	
6mm	424	
8mm	318	
10mm	255	
12mm	212	
14mm	182	
16mm	159	

**Machining of Wear Plates such as HARDOX - CREUSABRO - ABRO - RAEX - STRENX - BISALLOY**

### BEST PRACTICE ADVICE

**GUIDELINE PARAMETERS ONLY** - Actual parameters may vary depending on operating conditions

1. The extreme hardness and resistance of wear plate makes machining it extremely challenging.
2. Good results are dependent on the right setup - including high torque/slow speed, geared Magnet Drills, such as the Versadrive V125T, and correct lubrication
3. Using an incorrect or poorly maintained Magnet Drill with unstable drilling operation, poor magnet hold, excessive pressure or inadequate lubrication is likely to result in rapid tool failure.
4. Even with high tech tooling, successfully machining Wear plates is challenging with little or no margin for error. It not only requires the correct setup but also experienced operators with the time necessary to proceed with caution.
5. Feed should be applied constantly, do not allow the drill to dwell as the material will work harden (if a rest or repositioning of hands is required, then retract the cutting tool slightly off the material first)
6. When drilling hard materials drill required hole size in one operation - do not attempt to pilot drill & step up through drill sizes
7. Constant flood coolant is advisable to carry away any heat generated by cutting, as heat build up can cause work hardening
8. When cutting, any rubbing of the cutting tool must be avoided as it will increase the surface hardness, as wear plate material is designed to 'work-harden' to combat wear and abrasion
9. When using a 2-Geared Speed or 4-Geared Speed drilling machine, the lower gear speeds provide the most torque
10. When using the electronic variable speed and torque controls, maximum torque and power is available when both torque and speed are adjusted to their maximum setting
11. Machines fitted with torque control will try to maintain the selected speed and slow slightly, when under load
12. For best results use the new flood coolant pump with a soluble mix of Biocut Blue lubricant & room temperature tap water.  
Suggested mix: 0.5L of Biocut Blue to 3.5L water



**Cordless coolant pump**  
See page 65

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