

# Super Tool, Inc.

## Hard Steel Die Drill Selection Guide

Steel Types	Hardness Rockwell "C"	Fluted Type - Point Styles				Spade Type	
		118°		140°		Point Angle	
		Negative Edge	Positive Edge	Negative Edge	Positive Edge	120°	140°
Low and Medium Strength	35 to 50 Rc	-	* 5423 *	-	5423	* 5420 *	5421
	over 50 Rc	* 5425 *	-	5426	-	5420	* 5421 *
High Strength and High Temp. Alloys	35 to 50 Rc	-	5423	-	* 5423 *	5420	* 5421 *
	over 50 Rc	5425	-	* 5426 *	-	-	5421

\* Preferred Type \*

Speed: 75 to 100 SFPM  
Feed: 0.001 to 0.003 IPR power feed  
RPM=SFPM\*3.82/Cutting diameter

Note:

- 1) Flood the point with coolant
- 2) Apply light feed with steady pressure withdraw frequently (peck) to clear chips
- 3) Select spade type drill for rigidity in short reach applications
- 4) For general purpose or when application specifications are vague start with type 5425, 118° negative edge

Feeds & speeds are a starting recommendation only. Factors such as machine, fixture and tooling rigidity, horsepower available, coolant application and others will affect the performance significantly. Please read machine operators instructions and use all safety shields and glasses before performing these operations.

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