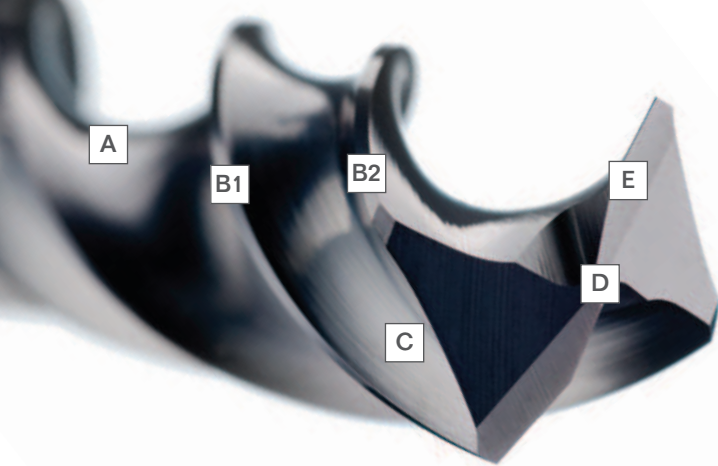




HIGH PERFORMANCE CARBIDE DRILLS



PERFORMANCE. PRECISION. PASSION. with Hi-PerCarb external coolant drills

The key features designed into the SGS Hi-PerCarb drill allow the product to offer application benefits not only beyond that of standard carbide drills, but also other High Performance drills. Each feature of the SGS Hi-PerCarb drill was uniquely engineered as a solution towards addressing the issues commonly encountered during high production drilling.

A	HIGH PERFORMANCE FLUTE DESIGN	efficiently transports chips increases strength for aggressive drilling captures chip in flute
A	Ti-NAMITE A COATING	improves resistance to heat increases wear resistance increases tool life
B1 B2	DOUBLE MARGIN DESIGN	improves accuracy improves surface finish increases stability and rigidity
C	SECONDARY FLUTE	improves coolant flow to point reduces friction along drill body assists in fine swarf evacuation
D	SPECIALIZED 145° NOTCHED POINT	self centering eliminates need for spot drill improves chip control decreases drill thrust and deflection
E	ENGINEERED EDGE PROTECTION	improves edge strength reduces edge fatigue allows increased feed rates

PERFORMANCE

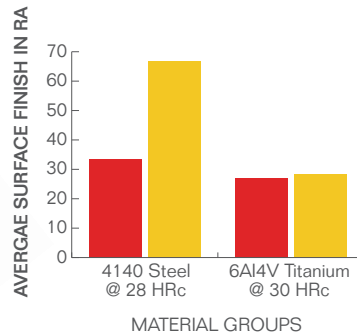
Machining Environment: Haas VM-3 with
9% Water Soluble Oil Flood Coolant

5/16" (.3125) diameter hole:

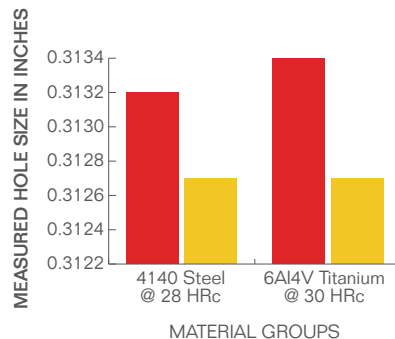
4140 application – .650" deep

6Al-4V application – 1.125" deep

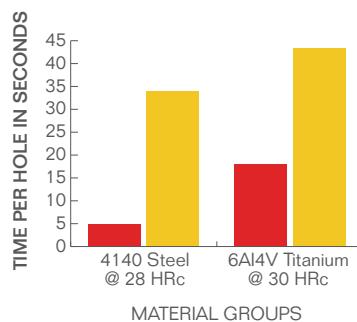
AVERAGE SURFACE FINISH RESULTS



ACCURACY OF HOLE PRODUCED



TOTAL CYCLE TIME



■ SGS HI-PERCARB ■ SOLID CARBIDE DRILL AND REAMER

The second margin gives the Hi-PerCarb drill a burnishing effect and the flute form effectively controls and transports chips allowing the drill to offer superior surface finishes and hole size in high production environments saving cycle time by often avoiding the need for reaming in many applications.