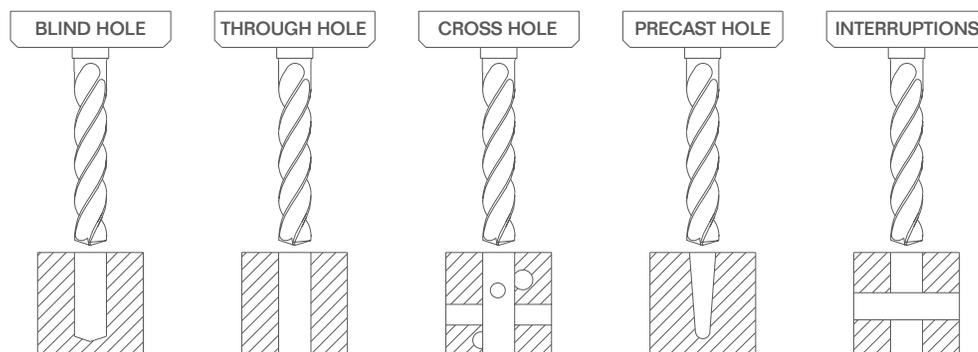


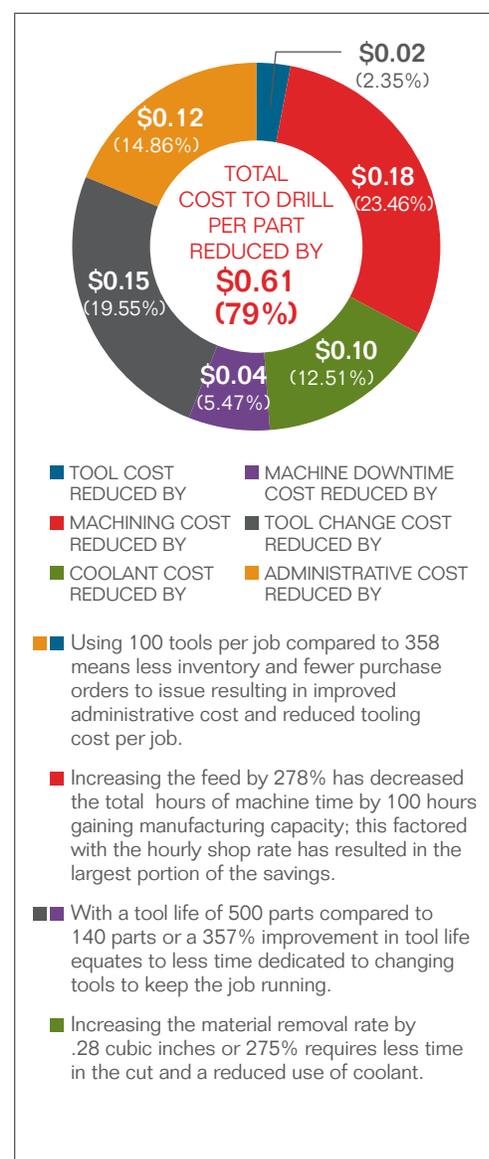
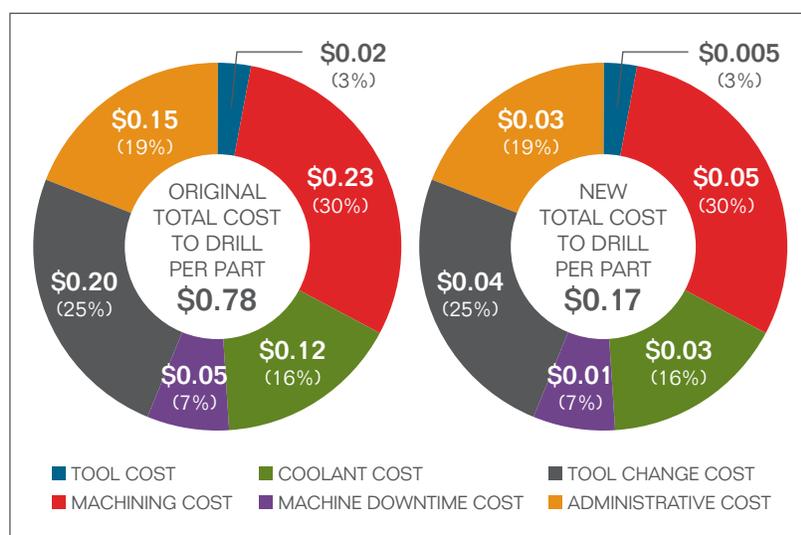
### PRECISION

The stability of the double margin design and penetration capability of the point geometry allow the Hi-PerCarb drill to address demanding applications that would normally require reduced operating parameters or a two step process.



### PASSION

The secondary flute provides a channel for cooling capabilities normally not found in external coolant drills, this combined with the Ti-NAMITE A tool coating and the high strength edge design results in increased operating parameters with additional tool life.



#### ACTUAL CUSTOMER APPLICATION USING A 6MM DRILL IN 17-4 PH STAINLESS STEEL

	COMPETITOR	SGS HI-PERCARB
NUMBER OF PARTS TO PRODUCE	50000	50000
SURFACE FEET PER MINUTE (SFM)	74	124
SPEED IN REVOLUTIONS PER MINUTE (RPM)	1200	2000
FEED IN INCHES PER MINUTE (IPM)	3.6	10
NUMBER OF PARTS PRODUCED PER TOOL	140	500
DEPTH OF HOLE	0.6800	0.6800
NUMBER OF NEW TOOLS REQUIRED TO COMPLETE JOB	358	100
TOTAL HOURS OF MACHINING TIME	157	57
TOTAL MACHINING COST	\$10,231.48	\$3,683.33
TOOL CHANGE COST	\$1,939.17	\$541.67
TOTAL COST	\$39,017.07	\$8,460.00
COST PER PART	\$0.78	\$0.17
MATERIAL REMOVAL RATE (IN <sup>3</sup> / MIN) – DRILLING	0.16	0.44
CUTTING TIME PER PART – MINUTES	0.19	0.07
SAVINGS PER PART – DOLLARS	0	\$0.61
TOTAL COST SAVINGS / JOB – PERCENTAGE	0	78.32%
TOTAL COST SAVINGS / JOB – DOLLARS	0	\$30,557.07