

Series 140 ICE-CARB



Kyocera SGS Precision Tools Case Study

INDUSTRY



ENGINEERING

MATERIAL

1020 Steel

PRODUCT

KSPT series 140 ICE-CARB Drill

APPLICATION

Hole Drilling

COMPETITOR

Internal coolant 5xD Carbide Drill

COOLANT

Semi-Synthetic

TOOL INFORMATION

4.6mm DIA / 36.0 mm LOC / 74.0mm OAL



GOALS

The goals of this study were to significantly reduce cost through a decrease in cycle time and increased tool efficiencies.

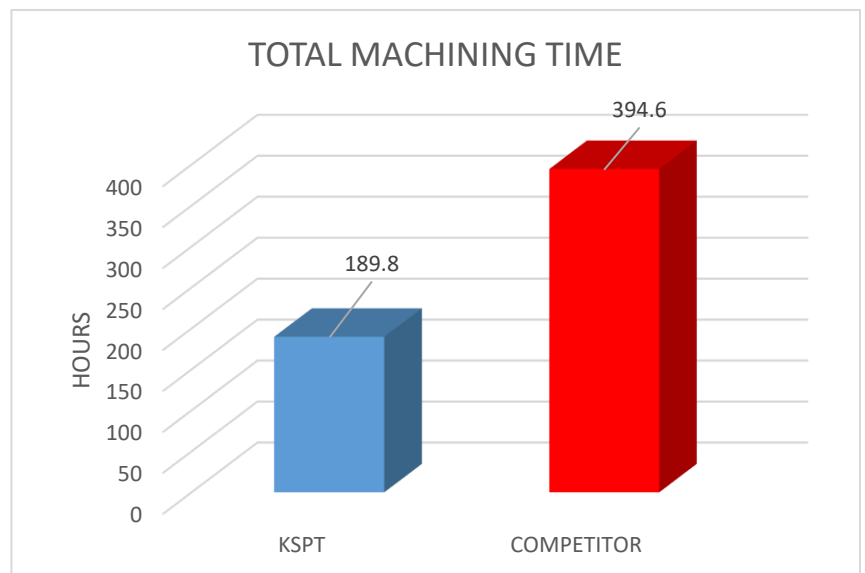
STRATEGY

KSPT approached this job with a series 140 ICE-CARB drill. KSPT's series 140 ICE-CARB, with its internal coolant design is ideal for improving surface finish without sacrificing speed and feed rates.

	KSPT	COMPETITOR
TOOL DIAMETER	4.6mm	4.6mm
SPEED	1484 RPM	928 RPM
FEED	41.6 IPM	20.0 IPM
AXIAL CUT (AP)	.3750	.3750
CYCLE TIME	14:48	30:45



KSPT's series 140 ICE-CARB produced a **52%** reduction in total machining hours.



RESULTS

The overall findings of this study indicate that although KSPT's ICE-CARB was priced 15% higher than the competition, our tool decreased cycle time by **52%**. This was accomplished through a **37%** increase in RPM and subsequently an additional **52%** increase in feed rate (IPM). These efficiencies led to a cost per part **savings of over \$17.00 per part made**. That, when multiplied by the number of parts made, showed a 52% reduction in machining cost. When all was said and done, KSPT's ICE-CARB saved the customer **\$13,293.46**.

