

## Cast Iron Machining ~ Enhanced Tool Life

95% of the Energy consumed in Metal Cutting is converted into Heat which can raise the Temperature at the Point-of-cut causing a Serious Concern !



Heat dissipation & Good Lubricity are of Prime Importance in High Speed Machining

## Component: Cylinder Block



## Customer Concerns

- Inconsistent Tool Life & Performance
- Enhanced tool cost per component
- Failure of Thru' Spindle Coolant delivery pumps

## Mission Accomplished

<b>CNC</b>	<b>Makino a81, H107</b>
<b>Component</b>	<b>Cylinder Block</b>
<b>Material</b>	<b>Cast Iron</b>

	Dia. 14.1 Drill		Dia. 6.8 Drill		M8X1.25 Tap*		M6X1 Tap*		Dia. 22.35 Hole Mill		Dia. 5 Drill	
	Before	After	Before	After	Before	After	Before	After	Before	After	Before	After
Tool Life (Nos)	34 - 40	42 - 48	55	68 - 80	100	130	100	130	300	340	150	180 - 240

Consistent tool life improvement ~ 30%

Even after extended use of the Tools the Wear is Consistent & Gradual.

Tool life improvement is an indication of smooth stress free machining.

# Sovereign Fortune Force at Reputed Cylinder Block Manufacturer on Makino CNC

