

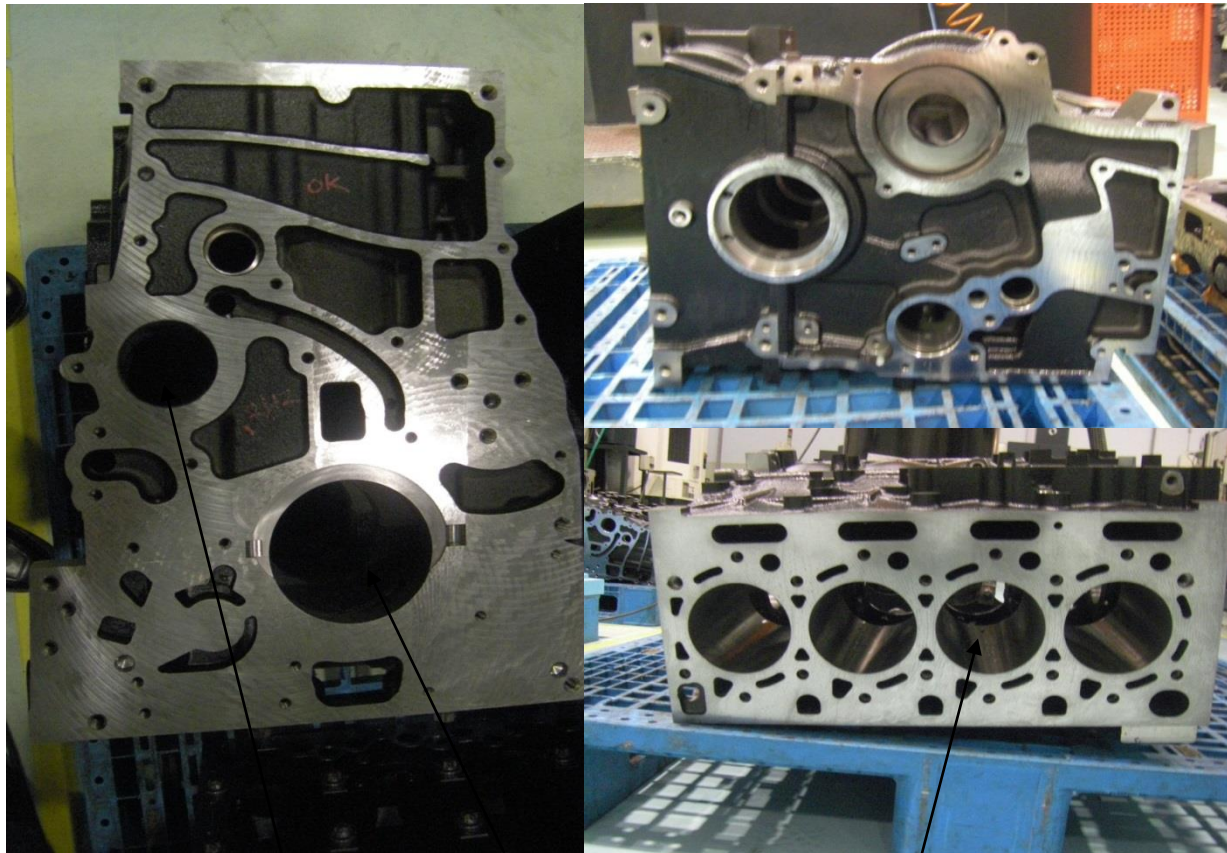
Cast Iron Machining ~ Enhanced Quality

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

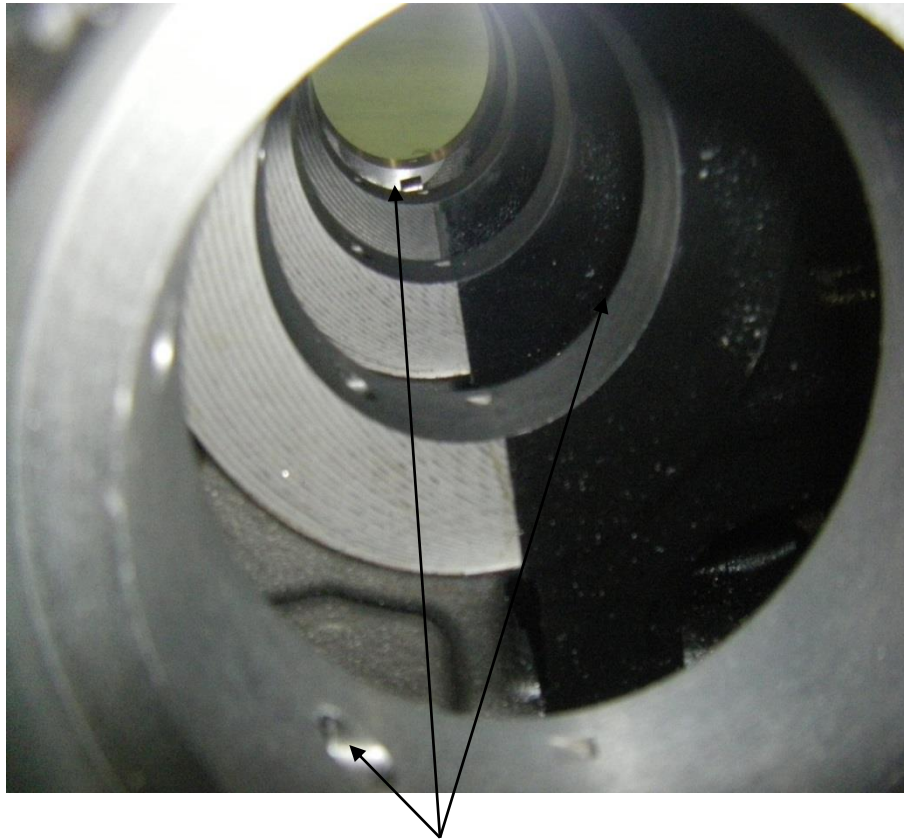
Component – Cylinder Block



Cam Bore Crank Bore

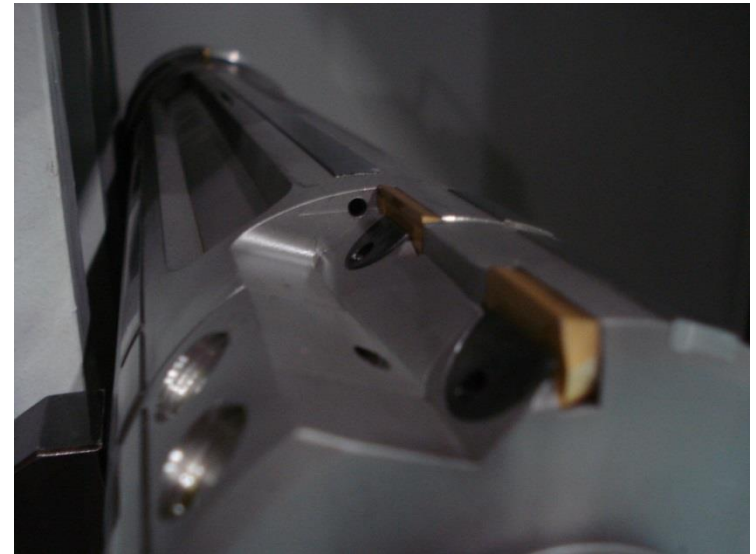
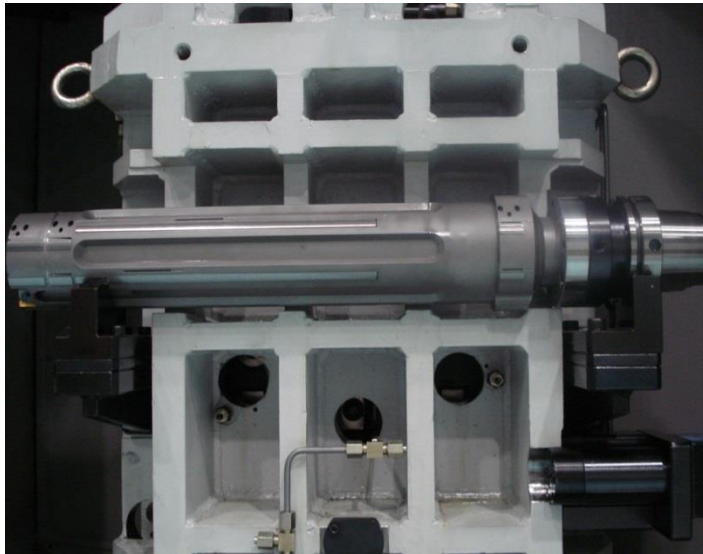
Cylinder Bore

Customer Concern – Crank Bore Finishing



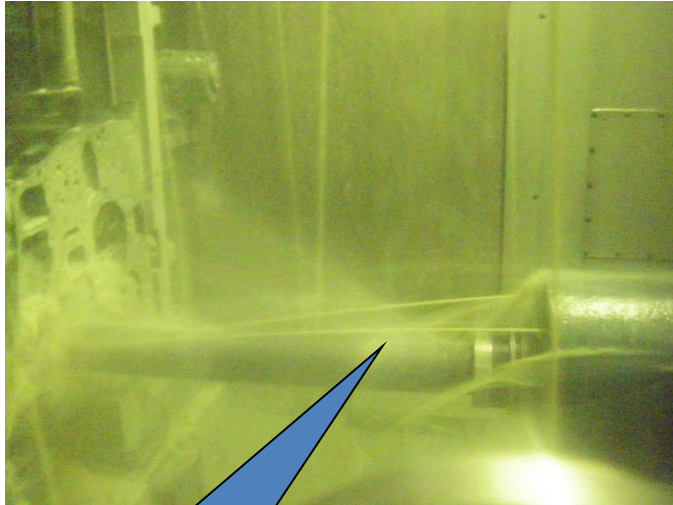
Cylinder Block,
Crank Bore Finishing
Concern : Severe Rubbing Marks

Critical Tool for Crank Bore Finishing

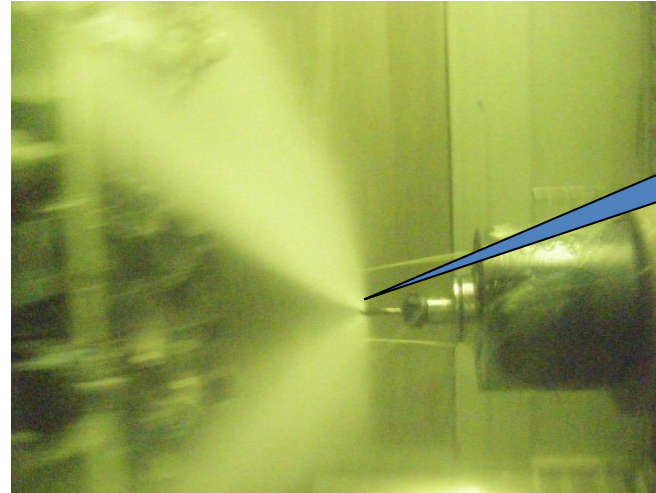


- Mapal, Ø91.7/92.010 Long Finish Bore.
- Boring Bar with Guide Pads for Crank Bore
- 6 carbide inserts in front at 120 degrees on periphery
- 6 guide pads along the length.
- Hollow from inside.
- Coolant Orifice : 24 Nos.
- Root Cause Analysis: Inadequate TSC Flow, Pressure, Lubricity & Filtration.

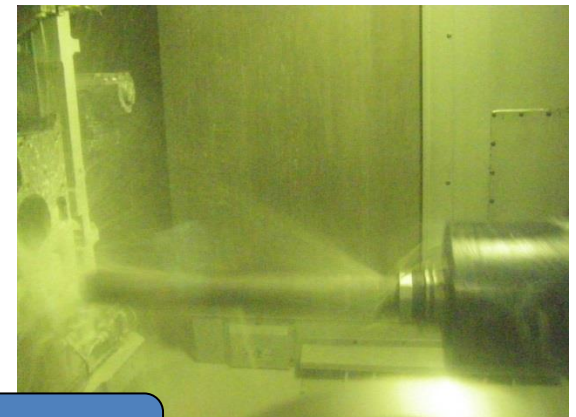
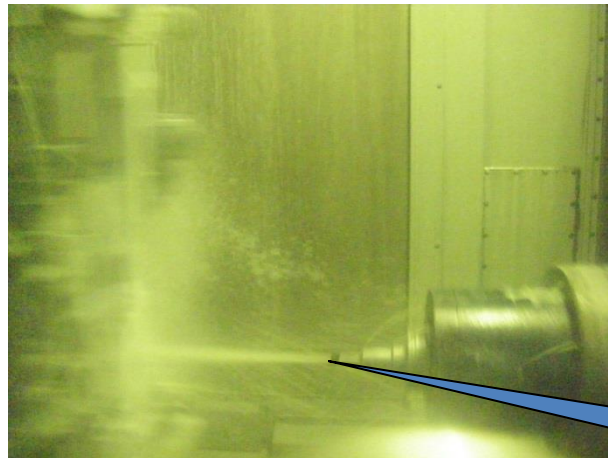
With Sovereign Fortune Force



Mapal Boring Bar
for Cam Bore



High Force Jet Stream



70 Bar High
Force Jet

Mission Accomplished

Rewarding Results:

1. Elimination of RUBBING MARKS from the Crank bore.
2. Consistent Cp/CpK results.
3. Better Surface Finish
4. Enhanced Tool life

Sovereign Fortune Force at Reputed Earth Moving Manufacturer on Makino CNC

