

# Carbide and HSS Tool Grinding Success

## Tooling Manufacturer (USA)

Carbide and HSS Tool Grinding  
Castrol Honilo® 710

**ANNUAL SAVINGS: \$76,473**



### THE SITUATION

A major tool manufacturer was having safety concerns with their grinding oil. The customer was grinding carbide and high-speed steel drills and end mills on the same machines. Several times a year, the fluid would ignite from the heat build up, shutting them down and costing them valuable productivity.

### BEFORE

- Fluid would catch fire several times per year
- Using a high cost straight oil
- Running machine tools at 80% efficiency, due to potential fire hazard

### AFTER

- Reduced oil cost by over \$245 per drum
- Increased machine tools to 120% efficiency and eliminated the potential fire hazard
- Reduced the cycle time of the 1-3/8" carbide drill by 10 minutes

### THE SOLUTION

- The objective was to reduce the fire hazard potential and improve productivity.
- A fluid with a slightly higher viscosity and flashpoint was recommended.
- Castrol worked closely with the customer's engineers to maximize the machine tool performance while maintaining the safest operating conditions.
- A team effort between on-site distributor representative, Castrol engineering, Castrol sales manager and customer personnel allowed for the success.

- 35% improvement in productivity
- Improved finishes
- Customer buy-in and support throughout

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## RECOMMENDATIONS

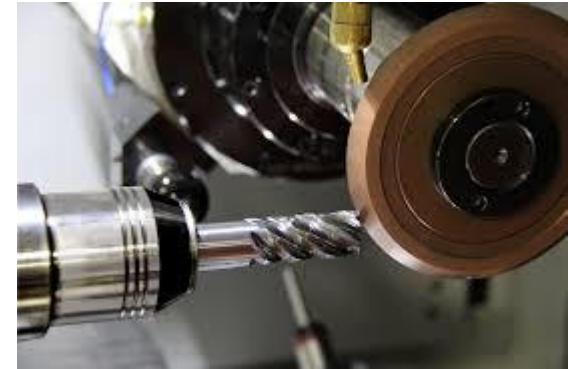
The proposal was made to convert the systems to a proven oil that has been utilized in similar applications and delivered beyond expectations. Castrol Honilo 710 worked excellent in conjunction with the Transor filter unit, remaining very clean running over time.

## CONCLUSION

One year after the oil conversion, the data shows improvements in productivity, fire potential and overall cost. Excellent operator acceptance was achieved as well.

**The overall result was \$76,473 in savings from improved productivity and lower oil cost.**

The customer is continuing to improve cycle times on other end mill sizes to generate additional savings.



## OTHER POTENTIAL APPLICATIONS

Castrol Honilo 710 can be used for grinding, honing, and small part machining on a wide variety of materials. It is very effective in standard Transor and other common filtration systems.