

## CASE STUDY 46

(A CHLORINE AND BORON FREE PRODUCT FOR CRANKSHAFT GRINDING)



### CUSTOMER DETAILS :

An Indian multinational automotive manufacturing company producing passenger cars, trucks, vans, coaches, buses, sports cars, construction equipment and military vehicles.



### OBJECTIVES FOR CONDUCTING THE TRIAL

1. To achieve the required finish.
2. No EHS Issues - Operator & Environmental Friendly.
3. To reduce the cost of oil.
4. No foaming issue



### OPERATING / APPLICATION DETAILS:

1. Machine : Landis M/C, UK Based
2. Tank Capacity : 10000 Ltrs
3. Part : Crank Shaft
4. Material : 42crMO4
5. Application : Grinding
6. Cycle time : 18 Min
7. Tool – CBN Grinding Wheels
8. Filtration : Conveyor
9. Wheel Coolant Pressure : 65 to 70 bar
10. Grinding Coolant Pressure: 15 to 25 bar
11. Chiller unit : Available
12. Grinding Dept : 1.2mm
13. Surface Finish : 0.6 Micron
14. Trial Evaluation period - 3 months



### COMPONENT VIEW



PRODUCT RECOMMENDED: HICUT 6710

## TRIAL RESULTS

The following trial objectives have been met successfully



Achieved required finish. 0.6 Micron



No EHS Issues observed - Operator & Environmental Friendly.



Direct cost saved ~20%