CASE STUDY 54

(A CHLORINE AND BORON FREE SEMI-SYNTHETIC COOLANT FOR ALL TYPES OF MACHINING)

CUSTOMER DETAILS :

A leading auto component manufacturer in northern india producing customised gearing and power transmission products including internal and external precision spur and helical gears, spline gears and shafts, st bevel gears and sub-assemblies containing gear parts primarily.

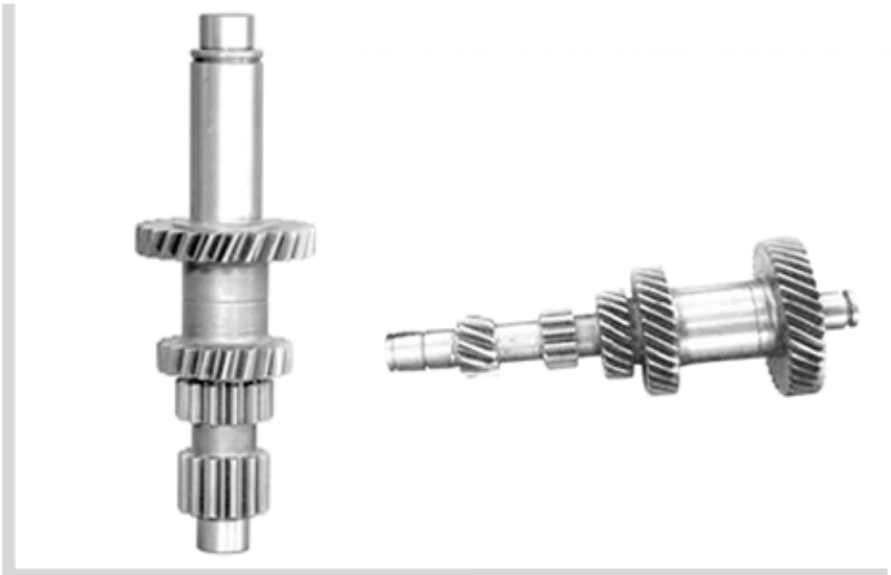
OBJECTIVES FOR CONDUCTING THE TRIAL

1. Need to achieve the required finish.
2. No EHS issues - Operator & environmental friendly.
3. To reduce the cost of oil.
4. No grinding burn marks

OPERATING / APPLICATION DETAILS:

1. Machine : Micromatic
2. Tank capacity : 600 ltrs
3. Part : Gears & Shafts
4. Material : Alloy steel
5. Application : Grinding
6. Cycle time : 12 Minutes
7. Filtration : Magnetic Conveyor
8. Initial loading : 600 lts Water + 30 lts Hicut 6710
9. Operating concentration : 5 %
10. RPM Component – 1500 RPM
11. Feed –rough feed 3.5 & finish feed .3
12. Ra Achieved : 4 Rz
13. Dressing frequency – 3 to 5 component
14. Trial evaluation – 6 months

COMPONENT VIEW



PRODUCT RECOMMENDED: HICUT 6710

TRIAL RESULTS

Achieved required finish.
3 Rz - 6 Rz

No EHS Issues observed Operator & environmental friendly.

No grinding burn marks issue.

Cost saving of more than 30% achieved as compared to blasocut 35 combi