

CASE STUDY 86

(SOLUBLE CUTTING OIL FOR ALUMINIUM AUTO COMPONENTS)



CUSTOMER DETAILS :

A company from South India who is one of the leading manufacturers of auto components for major OEMS.



OBJECTIVES FOR CONDUCTING THE TRIAL

1. Need to achieve the required finish – Visual finish
2. Need to achieve the tool life (Tap life- 4000 No's)
3. No stains in machined parts
4. Reduction in consumption cost
5. No EHS Issues (No skin & eye irritation)

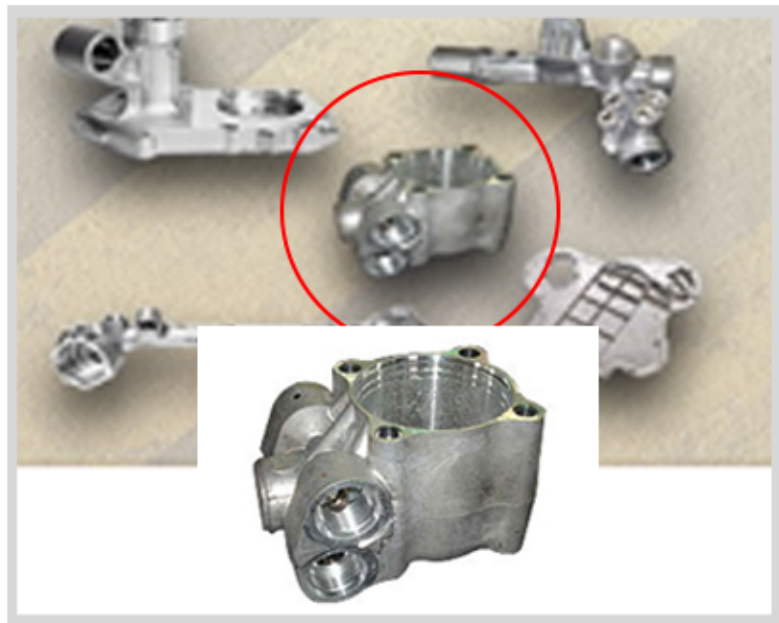


OPERATING / APPLICATION DETAILS:

1. Machines: AMS
2. Operation: Multiple machining
3. Tank capacity: 300 Ltr
4. Part: Pump Housing
5. Material: Al , ADC 12
7. Tools: Carbide & HSS material
8. Filtration: Chip conveyor, Drum filter
9. Existing product: Molygraph-Smoothkut SO 7100
10. Concentration: 5%
11. Cycle time: 10 ~15 mins



COMPONENT VIEW



PRODUCT RECOMMENDED: HICUT 900

TRIAL RESULTS



Achieved required finish:
Good Visual finish



Tap life increased -
~4400 No's



No stains in
machined area



No EHS Issues
observed



No foam or mist
formation



Good flush
ability



8% overall cost
savings achieved