HARDCASTLE PETROFER
industrial oils and chemicals

CASE STUDY 4

(SEMI-SYNTHETIC CUTTING FLUID)

CUSTOMER DETAILS :

A subsidiary of a multinational company manufacturing and supplying driveshafts to Original Equipment Manufacturers in the Indian automobile industry.

OBJECTIVES FOR CONDUCTING THE TRIAL

a) To reduce Foaming

b) To address EHS concern (skin itching/ Smell issue)

c) To meet the existing quality requirements

OPERATING / APPLICATION DETAILS:

- Machine Make: Meccanodora
- Tank capacity: 800 Ltrs
- Component: Tripod
- Material: Cast Iron
- Depth of cut: 320 Microns
- Existing Product: Competitor Product
- Water: DM water (Hardness < 5 ppm, Cl < 10 ppm, pH: 6.5)
- Operation: Surface Grinding
- Grinding Wheel: CBN
- Concentration Maintained: 3 ~ 5 % pH: 9
- Wheel Rpm: 1000 ~1600
- Dressing Frequency: 5 No's once
- Filters: Paper filter- 40 GSM
- Ra Required: 0.6 Ra
- Trial Period: 3 months

COMPONENT VIEW

Tripod

PRODUCT RECOMMENDED: HICUT 6080 B

TRIAL RESULTS

No foaming issues observed

Reduced Consumption as compared to competitor's product- By 20 %

Achieved Required finish (Achieved Ra: 0.4 ~0.5)

No EHS issues observed

Reduction in cost per component