

CASE STUDY 5

(ESTER BASED HOBBIING OIL)



CUSTOMER DETAILS :

A Leading Multinational company involved in manufacturing of Helical Gearmotors & Gearboxes, Precision Inline Gear Boxes & Planetary Right Angle Gear boxes.



OBJECTIVES FOR CONDUCTING THE TRIAL

- To reduce Mist
- To reduce stain marks on the component / Bed ways.
- To ensure Better Working Environment by reducing smoke.
- To Reduce overall Cost of oil.



OPERATING / APPLICATION DETAILS:

Operation Hobbing	Hobbing
Machine Name	Gleason Pfauter P 600
Component Name & Part No	Planetary Gear
Material	20 Mn Cr 5
Hardness	200 BHN
Type (Helical / Spur)	Spur
Module of the Gear	4.5
No. of teeth	12
Coating of HOB (Futura / Ticon / TIN /Non E)	Futura Nano
Recoating done after Re-sharpening	Yes
Tank Size	500
Top up of Oil / Month	365 Ltrs
Frequency of Topup	10 days
Leakage of Hyd / Lube oil in the machine	No
Hob Changeover time	305 seconds
Surface finish	3.2 Ra
Chiller unit	Yes



COMPONENT VIEW



PRODUCT RECOMMENDED: ISOCUT E 35 (M)

TRIAL RESULTS



No stain marks observed on the component / Bed ways



Reduced smoke observed, better Working Environment



Reduced overall cost of oil – Net Savings / Machine – Rs.1.87 Lakhs