

# CASE STUDY 83

## NEW GENERATION LUBRICANT FOR THE FORGING INDUSTRY



### CUSTOMER DETAILS :

One of the leading manufactures from South India producing steel forgings parts (valves, oil and gas parts, rollers, Auto parts & hydraulic cylinders parts).



### OBJECTIVES FOR CONDUCTING THE TRIAL

1. Consumption cost Reduction
2. Achieve the required Die life – ~5000 Numbers
3. No die stickiness
4. Better Surface Finish – Visual ( No wrinkle marks/ cracks)



### OPERATING / APPLICATION DETAILS:

1. Press : National Maxipress
2. Load :1600 Tons
3. Part : U Ring ( Trial taken part-Critical part)
4. Spray type: double side spray gun, pneumatic operated tank.
5. Material : EN 11
6. Billet Spec: breadth -6.5 \* length -160 CM
7. Billet weight : 6.5 kg ( Deep cavity part)- 3 stages ( Upsetting >blocker > finisher)
8. Billet temp : 1150 ~ 1250°C
9. Existing product : : XXX 105
10. Existing dilution ratio : 1:14 (Our trial ratio : 1:14)
11. Required die life: 5000 No's ( nitride coated die)



### COMPONENT VIEW



**PRODUCT RECOMMENDED: HILUBRIC FW 02 M**

## TRIAL RESULTS



LESS DIE CATCH UP IN  
CRITICAL COMPONENTS FORGING



GOOD EJECTION  
AFTER FORGING.



REQUIRED SURFACE FINISH ACHIEVED  
(NO WRINKLE MARKS)



LESS SCALE  
FORMATION



CONSUMPTION COST  
REDUCED : 2 %