

# CASE STUDY 7

## (MARQUENCHING OIL FOR GEARS AND SHAFTS)



### CUSTOMER DETAILS :

A leading tractor OEM



### OBJECTIVES FOR CONDUCTING THE TRIAL

To reduce the distortion in gears and shafts, without any reduction in the core hardness



### OPERATING/ APPLICATION DETAILS:

- Machine Make: S.Q.F.
- Material: Carburising Steel Grades
- Operating oil temperature: 135° C
- Quench Tank Capacity: 8000 ltrs
- Operation: Hardening, Quenching
- Agitation speed: High
- Component: Gears and Shafts
- Trial Period: 45 days
- Core hardness to be maintained: 30 to 43 hrc



### COMPONENT VIEW



**PRODUCT RECOMMENDED: MARQUENCH 849**

### TRIAL RESULTS



Distortion level is maintained under 20 micron band



Achieved better homogeneity in quenching



Reduction in Bore Shrinkage



Core hardness range achieved - 34 to 36 hrc