

## CASE STUDY 3

(LOW VOLATILITY COLD QUENCHING OIL)



### CUSTOMER DETAILS :

One of the leading Heat Treaters of auto components in Rajkot.



### OBJECTIVES FOR CONDUCTING THE TRIAL

To increase:

- a) Core Hardness
- b) Reduced Oil Consumption
- c) Reduction in Cycle Time



### OPERATING / APPLICATION DETAILS:

- a) Machine Make: Pit Type Furnace
- b) Open Tank capacity: 10,000 Ltrs
- c) Type of Operation: Carburising & Quenching
- d) Material Grade: 4140, 20MnCr5, 42CrMo4
- e) Trial Period: 3 months
- f) Existing Product: Competitor Product



### COMPONENT VIEW



Shaft and Gears



Connecting Rod

PRODUCT RECOMMENDED: HIQUENCH ISX 17 LV

## TRIAL RESULTS



Core Hardness increased  
by 4 HRC



Consumption reduced  
by 20%



Overall Heat Treatment Cycle  
reduced by 20 minutes, by  
reduction in soaking time