

CASE STUDY 75

(ISOMAX 169- FOR LOW EVAPOURATION AND OXIDATION STABLE QUENCHING OIL.)



PROFILE OF COMPANY:

They are the Manufactures variety of products like Cylindrical Bearings, Spherical Roller Bearings , Tapered Roller bearings and housed units etc. They are major suppliers to industries like Automotive, Commercial, Rail, Aerospace etc.



TRIAL CRITERIA

1. No smoke during quenching
2. Minimum distortion in thin wall parts
3. Consistent in cooling rate
4. Cost reduction



OPERATING/ APPLICATION DETAILS :

1. Application : Press Quench
2. Component : Inner/Outer Roller bearing
3. Material : 52100/4230/8231 – Steel
4. Tank Capacity : 9000 Ltrs
5. Cycle time : 2 min



COMPONENT DETAILS



PRODUCT RECOMMENDED: ISOMAX 169

TRIAL CONCLUSION



Smoke Observed was less compared to Houghto Quench G during continuous Quenching



Distortion Control was good Compared to Existing product. The Rework was 10% in Houghto quench G and it was reduced to 2-3% with our Isomax 169.



Uniformity in hardness was achieved and within the acceptable limit with our product.



Cost benefit – Both Direct and Indirect in terms of distortion control and lower evaporation



Based on the continuous performance they will be changing the other 2 tanks of 8 kl to our ISOMAX 169. This has given entry for us in the machining side.



Trials started with our hicut bio 120 in the hot turning machine.