

CASE STUDY 85

(CLEANER FOR BEARING INDUSTRY)



CUSTOMER DETAILS :

A leading manufacturer of Taper, Spherical and Cylindrical rollers. Preferred supplier to SKF, NEI, Schaeffler, NRB and Timken.



OBJECTIVES FOR CONDUCTING THE TRIAL

1. To suggest a cleaner which can operate at 5°C – 8°C
2. To achieve RA between 7% to 15% as per SKF Requirement in sub zero cleaning in post washing



OPERATING / APPLICATION DETAILS:

1. Washing machine make : Dongwoo Surfacetech (India) Pvt Ltd
2. Washing of Rollers: Prewashing between 5°C – 8°C
3. Type of Washing: Spraying with nozzles
4. Chiller Unit: Mitsubishi make
5. Tank capacity: 2800 liters (post washing)
6. Type of Rollers: Taper and Cylindrical
7. Roller size: 5 mm to 21 mm
8. Roundness within: 0.5 µm – 0.8 µm
9. Material grade: SAE 52100 & 100CrMnSi6-4
10. Raw material imported from: Daido Steel company, Japan and Ascometal Industries, France
7. Trial Operation: Post washing of rollers
8. Pre-operation: Quenching in cold oil ISOMAX 169 in continuous furnace
9. Post – Operation: Tempering
10. Tempered Hardness: 60 – 64 HRC
11. Water: DM Water
12. Concentration: 4.6%
13. Cycle of post washing: 6 mins
14. Oil Skimmer - Effective
15. Earlier media: Plain DM water



COMPONENT VIEW



PRODUCT RECOMMENDED: FEROCLEAN N 600

TRIAL RESULTS



Retain Austenite achieved
between 7% to 12%



Effective tramp
oil removal



No stain
marks