

CASE STUDY 78

BALL FLASHING COOLANT



CUSTOMER DETAILS :

A leading manufacturer of precision steel Balls & Needle rollers to all big bearings manufacturers in India and across the globe.



OBJECTIVES FOR CONDUCTING THE TRIAL

1. Good flushing
2. To increase Rust Prevention life
3. No increase in running cost



OPERATING / APPLICATION DETAILS:

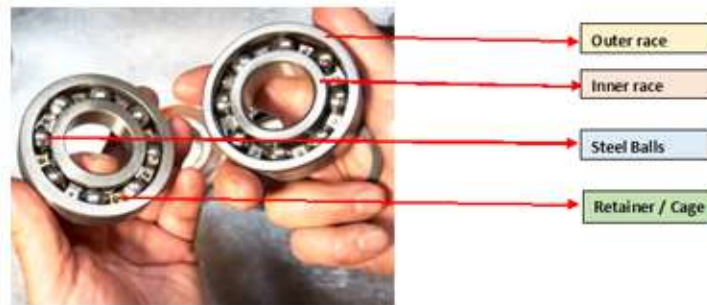
1. Machine make: Geniss, Backline (5 nos)
2. Balls sizes: G5 and G10 grade balls, ranging from 7/32" to 7/8" size
3. Component: Steel balls
4. Operation: Ball flashing
5. Current water based coolant: XXX GX 5
6. Concentration: Present 5%
7. Filtration: Yes, paper band
8. Oil Skimmer: Effective
9. Water Quality: DM water
10. Tank capacity: 6000 liters common tank
11. Material grade: SAE 52100 / 100 Cr6
12. Pre-operation: Heading of balls from wire



COMPONENT VIEW



Assembled product view



OBSERVATION AFTER 2 MONTHS

Monitoring Parameters	Competitor product	HPPL's HIGRIND CF	Benefits with HPPL coolant
Sump Concentration	5%	2.5%	Saving in first fill up cost
Material removal rate	50 microns	65 microns	Improvement in productivity
Rust Protection life	Few Hours	More than 48 hours	No separate RP fluid required
Flushing action	Dirt stick on balls and carries to next process	Dirt flushes away	Higrind CF dirt settles in tank bottom whereas in competitor coolant it remains suspended in coolant and interferes during flashing

PRODUCT RECOMMENDED: HIGRIND CF

TRIAL RESULTS



Improvement in rust prevention



Improvement in flushability



Saving in overall cost