Hi-Speed Industrial Service
7030 Ryburn Dr
Millington, Tn 38053
901-873-5300

AC Recondition As Found

Hiland Dairy (10126)
6901 I-30
Little Rock, AR 72209

FolderID: 100141
FormID: 14259150

AC Recondition - Rev. 2

Location:	MOTOR SHOP LR
Serial Number:	897625UF 014
Description:	7.2HP THERMO KING 1800RPM 184T

Hi-Speed Job Number:	100141
Manufacturer:	Leroy Somer
Serial Number:	897625UF 014
HP/kW:	7.2 (HP)
RPM:	1765 (RPM)
Frame:	184T
Voltage:	230 / 460
Current:	19.4/9.7
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
J-box Included:	Half
Coupling/Sheave:	None
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

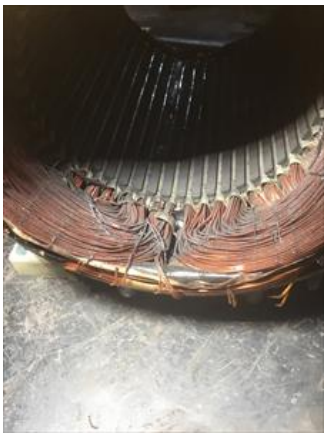
Priorities Found: **2 - High** **3 - Good**

Overall Condition

1. Report Date

2. Nameplate Picture P21

3. Photos of all six sides of the machine. P27



Bearing fragments imbedded in windings.

	4.	Describe the Overall Condition of the Equipment as Received	
Initial Mechanical/Electrical			
	5.	Does Shaft Turn Freely?	**(No) No**
		Both bearings locked up.	
	6.	Does Shaft Have Visible Damage?	**(No) No**
	7.	Assembled Shaft Runout	**Inches**
	8.	Assembled Shaft End Play	
	9.	Air Gap Variation <10%	
	10.	Lead Condition	P32

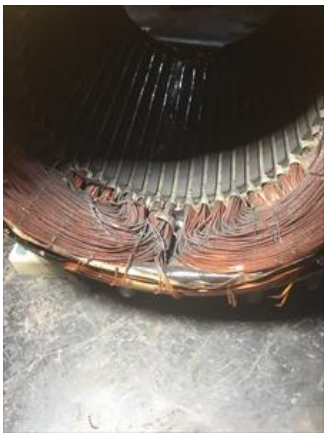
11.	Lead Length	**6 Inches**	
12.	Frame Condition	**pass**	
13.	Fan Condition		
14.	Broken or Missing Components		

Initial Electrical Inspection

15.	Insulation Resistance/Megger		
16.	Winding Resistance		

1-2	1-3	2-3

17.	Perform Surge Test	**(NA) Not Applicable**	
18.	Stator Condition	**windings shorted by bearing cage failure**	P39



Mechanical Inspection

19.	Drive End Bearing Number-	**6206**	
20.	Drive End Bearing Qty.	**1**	
21.	Drive End Bearing Type	**(Ball) Ball Bearing**	
22.	Drive End Lubrication Type	**(Grease) Grease Lubricated**	
23.	Drive End Bearing Insulation or Grounding Device?	**none**	
24.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**none**	
25.	Drive End Bearing Condition	**cage failed**	P42

26.	Opposite Drive End Bearing Number-	**6206**	P46

27.	Opposite Drive End Bearing Qty.	**1**	
28.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**	
29.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**	
30.	Opposite Drive End Bearing Insulation or Grounding Device?		
31.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**wavy washer**	
32.	Opposite Drive End Bearing Condition	**worn**	P56

33.	Drive End Seal		
34.	Opposite Drive End Seal		

Rotor Inspection

35.	Rotor Type/Material		P3

36.	Growler Test		**(Pass) Pass**
37.	Number of Rotor Bars		
38.	Rotor Condition		**good**
39.	List the Parts needed for the Repair Below		P29

ODE housing fit pitted and lip worn in.

40.	Signature of Technician that Disassembled Motor		

Mechanical Fits- Rotor

41.	Shaft Runout		**0.002 inches**
42.	Rotor Runout		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
43.	Coupling Fit Closest to Bearing Housing		
	0 Degrees	90 Degrees	120 Degrees
44.	Coupling Fit Closest to the end of the Shaft		
	0 Degrees	60 Degrees	120 Degrees
45.	Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees
	1.181	**1.1811**	**1.1811**
46.	Drive End Bearing Shaft Fit Condition		**(P) Pass**
47.	Opposite Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees
	1.181	**1.181**	**1.181**
48.	Opposite Drive End Bearing Shaft Fit Condition		
49.	Shaft Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	

Mechanical Fits- Bearing Housings

50.	Drive End - Endbell Bearing Fit		
	0 Degrees	60 Degrees	120 Degrees
51.	Drive End - Endbell Bearing Fit Condition		**(P) Pass**

52. Opposite Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees

Failed. Lip worn in

53. Opposite Drive End - Endbell Bearing Fit Condition **(F) Fail**

54. Bearing Cap Condition

Drive End Bearing Cap	Opposite Drive End Bearing Cap

55. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

56. List Machine Work Needed Below

#1 end bell fit.

57. Technician **Terrence. Holland**

Root Cause of Failure

58. Failure locations

Windings shorted

59. Root cause of failure

Poor bearing lubrication causing bearing cage failure.