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: 100749
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AC Recondition - Rev. 2

Location:	MOTOR SHOP LR
Serial Number:	W08 473295F
Description:	30KW ATB 1800RPM 200L

Hi-Speed Job Number:	100749
Manufacturer:	Other
Product Number:	3113762-2
Serial Number:	W08 473295F
HP/kW:	30 (kW)
RPM:	1780 (RPM)
Frame:	200L
Voltage:	460
Current:	56
Phase:	Three
Hz:	60 (Hz)
Enclosure:	TEFC
J-box Included:	Complete
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: **5 - High** **2 - Good**

Overall Condition

1. Report Date
2. Nameplate Picture P20

	3.	Photos of all six sides of the machine.	
	4.	Describe the Overall Condition of the Equipment as Received ***Serviceable***	
Initial Mechanical/Electrical			
	5.	Does Shaft Turn Freely?	**(No) No**
	6.	Does Shaft Have Visible Damage?	**(No) No**
	7.	Assembled Shaft Runout	
	8.	Assembled Shaft End Play	
	9.	Air Gap Variation <10%	

10.	Lead Condition	**(P) Pass**	P32

11.	Lead Length		
12.	Frame Condition	**pass**	
13.	Fan Condition	**(P) Pass**	P54

14.	Broken or Missing Components

Fan cover mount bolts. One connection block lead wire mount bolt.

Initial Electrical Inspection

15.	Insulation Resistance/Megger
16.	Winding Resistance

1-2	1-3	2-3

17.	Perform Surge Test		P35

18.	Number of Stator Slots		
19.	Stator Condition	**rewind stator**	

Mechanical Inspection

20.	Drive End Bearing Number-	**6212 2Z**	
21.	Drive End Bearing Qty.	**1**	
22.	Drive End Bearing Type	**(Ball) Ball Bearing**	
23.	Drive End Lubrication Type	**(Grease) Grease Lubricated**	
24.	Drive End Bearing Insulation or Grounding Device?	**none**	
25.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**yes, 2ea.**	P39

26.	Drive End Bearing Condition	**total cage and bearing failure.**	
27.	Opposite Drive End Bearing Number-	**6212 2Z**	

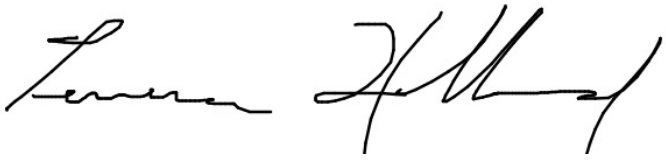
28.	Opposite Drive End Bearing Qty.	**1**	P48

29.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**
30.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**
31.	Opposite Drive End Bearing Insulation or Grounding Device?	**none**
32.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**none**
33.	Opposite Drive End Bearing Condition	**replace**
34.	Drive End Seal	**none**
35.	Opposite Drive End Seal	**none**

Rotor Inspection

36.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**	P3

37.	Growler Test	**(Pass) Pass**
38.	Number of Rotor Bars	
39.	Rotor Condition	**pass**
40.	List the Parts needed for the Repair Below ***Re-sleeve both end bell housing fits. Machine both shaft bearing journals. Rewind Stator.***	
41.	Signature of Technician that Disassembled Motor	**Terrence Holland**



Mechanical Fits- Rotor

42. Shaft Runout

43. Rotor Runout

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

44. Coupling Fit Closest to Bearing Housing

0 Degrees	90 Degrees	120 Degrees

45. Coupling Fit Closest to the end of the Shaft

0 Degrees	60 Degrees	120 Degrees

46. Drive End Bearing Shaft Fit P40

0 Degrees	60 Degrees	120 Degrees

Excessive wear.

47. Drive End Bearing Shaft Fit Condition **(F) Fail** P45

48. Opposite Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
2.3621	**2.362**	**2.3622**

49. Opposite Drive End Bearing Shaft Fit Condition **(F) Fail**

Out of tolerance.

50. Shaft Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

Mechanical Fits- Bearing Housings

51. Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees

Excessive wear.

52. Drive End - Endbell Bearing Fit Condition **(F) Fail** P10

53. Opposite Drive End - Endbell Bearing Fit P17

0 Degrees	60 Degrees	120 Degrees

Excessive wear.

54. Opposite Drive End - Endbell Bearing Fit Condition **(F) Fail** P22

55. Bearing Cap Condition

Drive End Bearing Cap	Opposite Drive End Bearing Cap
none	**none**

56. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

57. List Machine Work Needed Below

Re-sleeve both housing fits. Machine both shaft bearing journals.

58. Technician **Terrence Holland**

Root Cause of Failure

59. Failure locations

Windings shorted on drive end. Both housing fits bad. Both shaft fits bad.

60. Root cause of failure