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

AC Inspection as Found

Sage V Foods
5901 SLOAN DRIVE
LITTLE ROCK, AR 72206

FolderID: 101627
FormID: 17347485

AC Inspection - Rev. 2

Location:	MOTOR SHOP LR
Serial Number:	
Description:	50HP BALDOR

Hi-Speed Job Number:	101627
Manufacturer:	Baldor
Serial Number:	C2204261427
HP/kW:	50 (HP)
RPM:	1770 (RPM)
Frame:	326TD
Voltage:	230 / 460
Current:	117-57
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
J-box Included:	Complete
Coupling/Sheave:	None
Date Received:	07/18/2023
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Rewind:	No
Shaft Machined Fit Repairs Required:	Yes
Bearing Housing Machined Fit Repairs Required:	No
Heaters:	No
Bearing Type:	Rolling Element

Priorities Found: **1 - High** **8 - Good**

Overall Condition

1. Report Date
2. Nameplate Picture P37

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?	**(Yes) Yes**
	6.	Does Shaft Have Visible Damage?	**(Yes) Yes** P17
		Key way wallowed.	

	7.	Assembled Shaft Runout	**0.9 Inches**
	8.	Assembled Shaft End Play	
	9.	Air Gap Variation <10%	
	10.	Lead Condition	**(P) Pass**
	11.	Lead Length	**10.5 Inches**

12.	Lead Numbers	**1-9**	
13.	Frame Condition	**pass**	P105

14.	Fan Condition	**(P) Pass**	P109

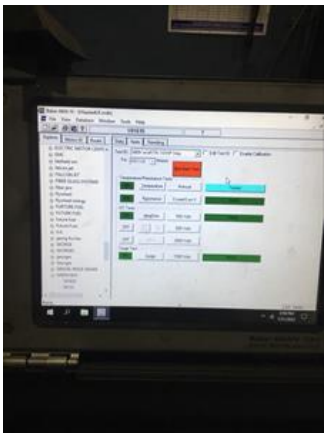
15.	Broken or Missing Components		

Initial Electrical Inspection

16.	Insulation Resistance/Megger		
17.	Winding Resistance		

1-2	1-3	2-3

18.	Perform Surge Test	**(P) Pass**	P58



19.	Number of Stator Slots	**48 Megohms**	

20.	Stator Condition	**pass**	
21.	Stator Thermistors/Ohms	**none**	
22.	Stator Overloads/Ohms	**none**	

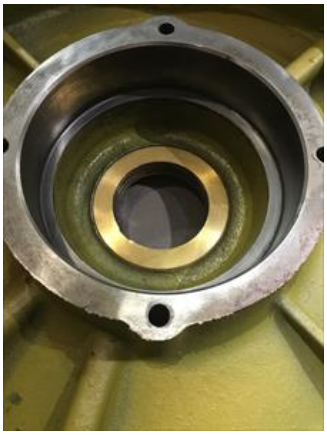
Mechanical Inspection

23.	Drive End Bearing Brand	**Peer**	
24.	Drive End Bearing Number-	**6312**	P28

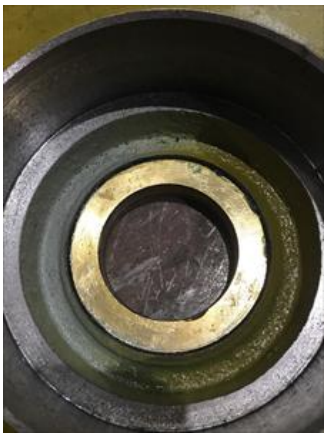
25.	Drive End Bearing Qty.	**1**	
26.	Drive End Bearing Type	**(Ball) Ball Bearing**	
27.	Drive End Lubrication Type	**(Grease) Grease Lubricated**	
28.	Drive End Bearing Insulation or Grounding Device?	**none**	
29.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**star washer and gland nut**	
30.	Drive End Bearing Condition	**replace**	
31.	Opposite Drive End Bearing Brand	**PEER**	
32.	Opposite Drive End Bearing Number-	**6312**	P99

33.	Opposite Drive End Bearing Qty.	**1**	
34.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**	
35.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**	
36.	Opposite Drive End Bearing Insulation or Grounding Device?	**none**	
37.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**wavy washer**	
38.	Opposite Drive End Bearing Condition	**replace**	P116

39. Drive End Seal **in pro** P119



40. Opposite Drive End Seal **in pro** P121



Rotor Inspection

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

42.	Growler Test	**(Pass) Pass**	
43.	Number of Rotor Bars	**40**	
44.	Rotor Condition	**shaft replacement needed.**	P40

Shaft bent more than .90. And key way wallowed.

45. List the Parts needed for the Repair Below

New shaft, and new bearings.

46. Signature of Technician that Disassembled Motor — **Terrence Holland**

Mechanical Fits- Rotor

47.	Shaft Runout	**0.9 inches**
48.	Rotor Runout	

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

49. Coupling Fit Closest to Bearing Housing

0 Degrees	90 Degrees	120 Degrees

50. Coupling Fit Closest to the end of the Shaft

0 Degrees	60 Degrees	120 Degrees

51. Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees

Needs new shaft

52. Drive End Bearing Shaft Fit Condition **(P) Pass**

53. Opposite Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
2.363	**2.3632**	**2.363**

54. Opposite Drive End Bearing Shaft Fit Condition **(P) Pass**

55. Shaft Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

Mechanical Fits- Bearing Housings

56. Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
5.119	**5.1188**	**5.1188**

57. Drive End - Endbell Bearing Fit Condition **(P) Pass**

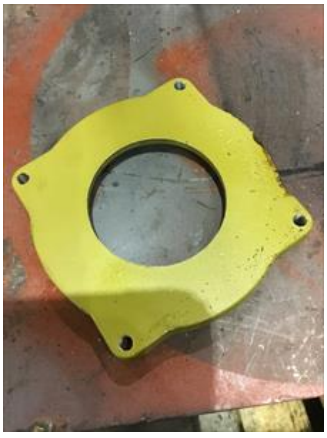
58. Opposite Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
5.1187	**5.1185**	**5.1186**

59. Opposite Drive End - Endbell Bearing Fit Condition **(P) Pass**

60. Bearing Cap Condition P52

Drive End Bearing Cap	Opposite Drive End Bearing Cap
pass	



61. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

62. List Machine Work Needed Below

New shaft

63. Technician **Terrence Holland**

Dynamic Balance Report

64. Rotor Weight and Balance Grade

Rotor Weight	Balance Grade

65. Initial Balance Readings

Drive End	Opposite Drive End

66. Final Balance Readings

Drive End	Opposite Drive End

67. Technician

Root Cause of Failure

68. Failure locations

69. Root cause of failure

Mechanical Fits- Rotor - Post Repair

70. Shaft Runout Post Repair

71. Rotor Runout Post Repair

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

72. Coupling Fit Closest to Bearing Housing Post Repair

0 Degrees	90 Degrees	120 Degrees

73. Coupling Fit Closest to the end of the Shaft Post Repair

0 Degrees	60 Degrees	120 Degrees

74. Drive End Bearing Shaft Fit Post Repair

0 Degrees	60 Degrees	120 Degrees

75. Opposite Drive End Bearing Shaft Fit Post Repair

0 Degrees	60 Degrees	120 Degrees

76. Shaft Air Seal Fits Post Repair

Drive End Air Seal	Opposite Drive End Air Seal

77. Shaft Repair Sign-off

Assembly

78. QC Check All Parts for Cleanliness Prior to Assembly

79. Photograph All Major Components prior to assembly

80. Final Insulation Resistance Test

81. Assembled Shaft Endplay

82. Assembled Shaft Runout

83.	Test Run Voltage		
	Volts	Volts	Volts
84.	Test Run Amperage		
	Amps	Amps	Amps
85.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
86.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
87.	Ambient Temperature - Fahrenheit		
88.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
89.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
90.	Stator Temperatures- Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
91.	Document Final Condition with Pictures after paint		
92.	Final Pics and QC Review		