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: 101836
FormID: 17857840

AC Inspection - Rev. 2

Location:	MOTOR SHOP LR
Serial Number:	
Description:	25 HP BALDOR

Hi-Speed Job Number:	101836
Manufacturer:	Baldor
Serial Number:	10-0000-0086
HP/kW:	25 (HP)
RPM:	1775 (RPM)
Frame:	284T
Voltage:	230 / 460
Current:	62 / 31
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.00
J-box Included:	Half
Coupling/Sheave:	None
Date Received:	09/13/2023
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final

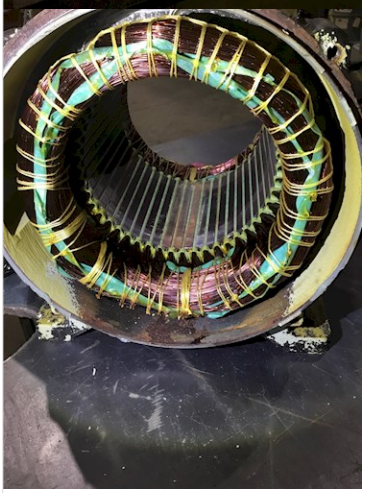
Priorities Found: **4 - High** **8 - Good**

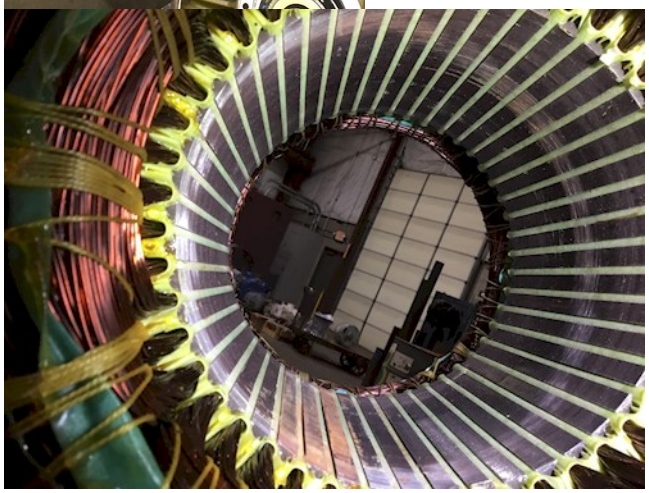
Overall Condition

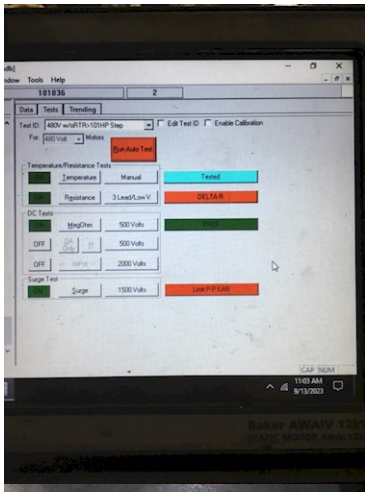
1. Report Date
2. Nameplate Picture P37









	3.	Photos of all six sides of the machine.	
	4.	Describe the Overall Condition of the Equipment as Received ***Dirty***	
Initial Mechanical/Electrical			
●	5.	Does Shaft Turn Freely?	**(Yes) Yes**
	6.	Does Shaft Have Visible Damage?	**(No) No**
●	7.	Assembled Shaft Runout	**0.001 Inches**
	8.	Assembled Shaft End Play	
	9.	Air Gap Variation <10%	

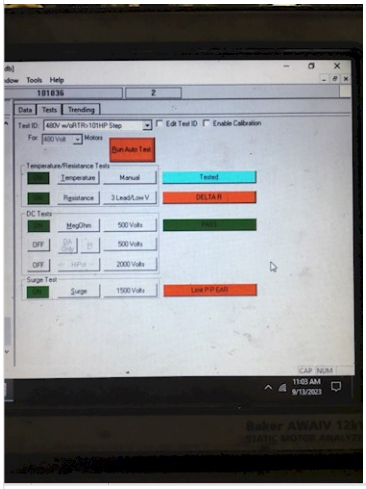
10.	Lead Condition			**(F) Fail**	P56

Bare wires

11.	Lead Length			**14 Inches**
12.	Lead Numbers			**1-9**
13.	Frame Condition			**pass**
14.	Fan Condition			**(N) NA**
15.	Heater Quantity, Ratings			
	Quantity	Volts/Watts	Pass/Fail	
16.	Broken or Missing Components			**na**

Initial Electrical Inspection

17.	Insulation Resistance/Megger			
18.	Winding Resistance			
	1-2	1-3	2-3	
19.	Perform Surge Test			**(F) Fail** P58



20.	Number of Stator Slots	
21.	Stator Condition	**pass**
22.	Stator Thermistors/Ohms	
23.	Stator Overloads/Ohms	

Mechanical Inspection

24.	Drive End Bearing Brand	
25.	Drive End Bearing Number-	**6311**

26.	Drive End Bearing Qty.	**1**	
27.	Drive End Bearing Type	**(Ball) Ball Bearing**	
28.	Drive End Lubrication Type	**(Grease) Grease Lubricated**	
29.	Drive End Bearing Insulation or Grounding Device?	**na**	
30.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**na**	
31.	Drive End Bearing Condition	**signs of frosting**	P80

32.	Opposite Drive End Bearing Brand		
33.	Opposite Drive End Bearing Number-	**6309**	
34.	Opposite Drive End Bearing Qty.	**1**	
35.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**	
36.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**	
37.	Opposite Drive End Bearing Insulation or Grounding Device?	**na**	
38.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**wavy washer**	
39.	Opposite Drive End Bearing Condition	**severe frosting**	P114

40.	Drive End Seal	**labyrinth seal**	
41.	Opposite Drive End Seal		
42.	DE Sleeve Bearing Inside Diameter		

0 degrees	120 degrees	240 degrees

43.	DE Sleeve Bearing Outside Diameter	

0 degrees	120 degrees	240 degrees

44.	DE Sleeve Bearing Housing Inside Diameter		
	0 degrees	120 degrees	240 degrees
45.	DE Sleeve Bearing to Housing Clearance		
	0 degrees	120 degrees	240 degrees
46.	ODE Sleeve Bearing Inside Diameter		
	0 degrees	120 degrees	240 degrees
47.	ODE Sleeve Bearing Outside Diameter		
	0 degrees	120 degrees	240 degrees
48.	ODE Sleeve Bearing Housing Inside Diameter		
	0 degrees	120 degrees	240 degrees
49.	ODE Sleeve Bearing to Housing Clearance		
	0 degrees	120 degrees	240 degrees

Rotor Inspection

50.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**
51.	Growler Test	**(Pass) Pass**
52.	Number of Rotor Bars	**42**
53.	Rotor Condition	**pass**
54.	List the Parts needed for the Repair Below ***6311*** ***6309*** ***Bearing sleeve for ODE end bell***	
55.	Signature of Technician that Disassembled Motor	**Cw**

Mechanical Fits- Rotor

56.	Shaft Runout		
57.	Rotor Runout		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
58.	Coupling Fit Closest to Bearing Housing		
	0 Degrees	90 Degrees	120 Degrees
59.	Coupling Fit Closest to the end of the Shaft		
	0 Degrees	60 Degrees	120 Degrees
60.	Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees

61.	Drive End Bearing Shaft Fit Condition			**(P) Pass**
62.	Opposite Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
63.	Opposite Drive End Bearing Shaft Fit Condition			**(P) Pass**
64.	Shaft Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		

Mechanical Fits- Bearing Housings

65.	Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
66.	Drive End - Endbell Bearing Fit Condition			**(P) Pass**
67.	Opposite Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	3.9379	**3.9379**	**3.9379**	
68.	Opposite Drive End - Endbell Bearing Fit Condition			**(P) Pass**
69.	Bearing Cap Condition			P50
	Drive End Bearing Cap	Opposite Drive End Bearing Cap		

Pass

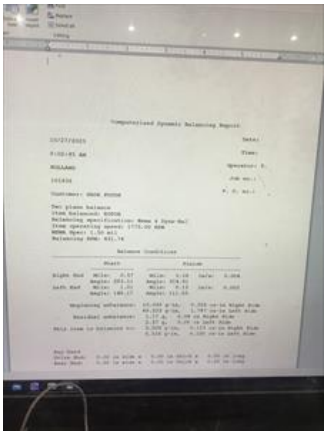
70.	End Bell Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		
71.	List Machine Work Needed Below			
72.	Technician			**Cw**

Dynamic Balance Report

73.	Rotor Weight and Balance Grade			
	Rotor Weight	Balance Grade		

74.	Initial Balance Readings		P11
	Drive End	Opposite Drive End	

75.	Final Balance Readings		P27
	Drive End	Opposite Drive End	



76.	Technician

Rewind

77.	Core Test Results - Watts loss per Pound		
	Pre-Burnout	Post Burnout	

78.	Core Hot Spot Test		
	Pre-Burnout	Post-Burnout	

79.	Post Rewind Electrical Test- Insulation Resistance
80.	Post Rewind Polarization Index

81.	Post Rewind Winding Resistance			
	1-2	1-3	2-3	

82.	Post Rewind Surge Test
83.	Post Rewind Hi-Pot
84.	Technician

Root Cause of Failure

85. Failure locations

Bearings and windings

86. Root cause of failure

Wear, frosting, and water contamination

Mechanical Fits- Rotor - Post Repair

87. Shaft Runout Post Repair

88. Rotor Runout Post Repair

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

89. Coupling Fit Closest to Bearing Housing Post Repair

0 Degrees	90 Degrees	120 Degrees

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

0 Degrees	60 Degrees	120 Degrees

91. Drive End Bearing Shaft Fit Post Repair

0 Degrees	60 Degrees	120 Degrees

92. Opposite Drive End Bearing Shaft Fit Post Repair

0 Degrees	60 Degrees	120 Degrees

93. Shaft Air Seal Fits Post Repair

Drive End Air Seal	Opposite Drive End Air Seal

94. Shaft Repair Sign-off

Mechanical Fits- Bearing Housings - Post Repair

95. Drive End - Endbell Bearing Fit Post Repair

0 Degrees	60 Degrees	120 Degrees

96. Opposite Drive End - Endbell Bearing Fit Post Repair

0 Degrees	60 Degrees	120 Degrees

97. Bearing Cap Condition Post Repair

Drive End Bearing Cap	Opposite Drive End Bearing Cap

98. End Bell Air Seal Fits Post Repair

Drive End Air Seal	Opposite Drive End Air Seal

99. DE Sleeve Bearing Inside ID Post Repair

Measure 1	Measure 2	Measure 3

100. DE Sleeve Bearing Outside ID Post Repair

Measure 1	Measure 2	Measure 3

101. DE Sleeve Bearing Inside OD Post Repair

Measure 1	Measure 2	Measure 3

102. DE Sleeve Bearing Outside OD Post Repair

Measure 1	Measure 2	Measure 3

103. End Bell Repair Sign-off

104. ODE Sleeve Bearing Inside ID Post Repair

Measure 1	Measure 2	Measure 3

105. ODE Sleeve Bearing Outside ID Post Repair

Measure 1	Measure 2	Measure 3

106. ODE Sleeve Bearing Inside OD Post Repair

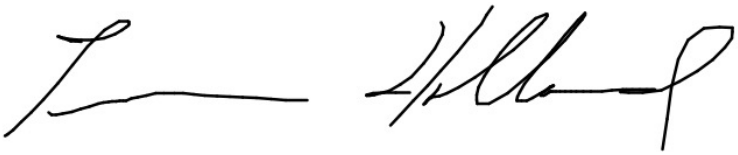
Measure 1	Measure 2	Measure 3

107. ODE Sleeve Bearing Outside OD Post Repair

Measure 1	Measure 2	Measure 3

Assembly

108. QC Check All Parts for Cleanliness Prior to Assembly **Terrence Holland**



109. Photograph All Major Components prior to assembly P16

	110.	Final Insulation Resistance Test	**1,300 Megohms**	
	111.	Assembled Shaft Endplay	**0 inches**	
●	112.	Assembled Shaft Runout	**inches**	
	113.	Test Run Voltage		P55
		Volts Volts Volts		

	114.	Test Run Amperage		
		Amps Amps Amps		

115.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
116.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
117.	Ambient Temperature - Fahrenheit		
118.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
119.	Drive End Bearing Temps - Fahrenheit 20-30 Minutes		
	20 Minutes	25 Minutes	30 Minutes
120.	Drive End Bearing Temps - Fahrenheit 35-45 Minutes		
	35 Minutes	40 Minutes	45 Minutes
121.	Drive End Bearing Temps - Fahrenheit 50-60 Minutes		
	50 Minutes	55 Minutes	60 Minutes
122.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
123.	Opposite Drive End Bearing Temps - Fahrenheit 20-30 Minutes		
	20 Minutes	25 Minutes	30 Minutes
124.	Opposite Drive End Bearing Temps - Fahrenheit 35-45 Minutes		
	35 Minutes	40 Minutes	45 Minutes
125.	Opposite Drive End Bearing Temps - Fahrenheit 50-60 Minutes		
	50 Minutes	55 Minutes	60 Minutes
126.	Stator Temperatures- Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
127.	Stator Temperatures- Fahrenheit 20-30 Minutes		
	20 Minutes	25 Minutes	30 Minutes
128.	Stator Temperatures- Fahrenheit 35-45 Minutes		
	35 Minutes	40 Minutes	45 Minutes
129.	Stator Temperatures- Fahrenheit 50-60 Minutes		
	50 Minutes	55 Minutes	60 Minutes
130.	Document Final Condition with Pictures after paint		
131.	Final Pics and QC Review	**Terrence Holland**	P126

Co sign: CW