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

AC Recondition As Found

Sage V Foods
5901 SLOAN DRIVE
LITTLE ROCK, AR 72206

FolderID: 100098
FormID: 14362997

AC Recondition - Rev. 2

Location:	MOTOR SHOP LR
Serial Number:	EF5T46663N-F4-4-12/20
Description:	0.5HP SWECO 1200RPM 143TZX

Hi-Speed Job Number:	100098
Manufacturer:	US Motors/Nidec
Serial Number:	EF5T46663N-F4-4-12/20
HP/kW:	0.5 (HP)
RPM:	1160 (RPM)
Frame:	143TZX
Voltage:	460
Current:	1.45
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.00
Enclosure:	TENV
J-box Included:	None
Coupling/Sheave:	None
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **6 - Good**

Overall Condition

1. Report Date
2. Nameplate Picture P21

	3.	Photos of all six sides of the machine.	
	4.	Describe the Overall Condition of the Equipment as Received	
Initial Mechanical/Electrical			
●	5.	Does Shaft Turn Freely?	**(Yes) Yes**
	6.	Does Shaft Have Visible Damage?	**(No) No** P12

7.	Assembled Shaft Runout	
8.	Assembled Shaft End Play	
9.	Air Gap Variation <10%	

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

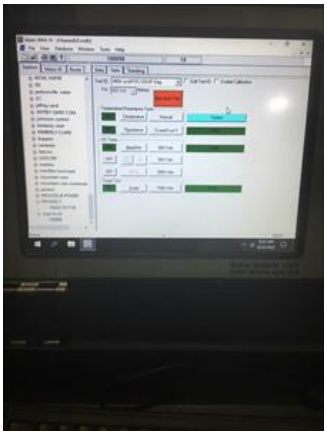
11.	Lead Length		
12.	Frame Condition		
13.	Fan Condition	**(N) NA**	
14.	Broken or Missing Components		

Initial Electrical Inspection

15.	Insulation Resistance/Megger	**Megohms**	
16.	Winding Resistance		

1-2	1-3	2-3

17.	Perform Surge Test	**(P) Pass**	P35



18.	Stator Condition		

Mechanical Inspection

19.	Drive End Bearing Number-	**22308**	P8

20.	Drive End Bearing Qty.	**1**	
21.	Drive End Bearing Type	**(Spherical) Spherical Roller 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	**worn/contaminated grease**	
26.	Opposite Drive End Bearing Number-	**NU307**	P46

27.	Opposite Drive End Bearing Qty.	**1**	
28.	Opposite Drive End Bearing Type	**(Roller) Roller Bearing**	
29.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**	
30.	Opposite Drive End Bearing Insulation or Grounding Device?	**none**	
31.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**none**	
32.	Opposite Drive End Bearing Condition	**worn/ dirty grease**	P56

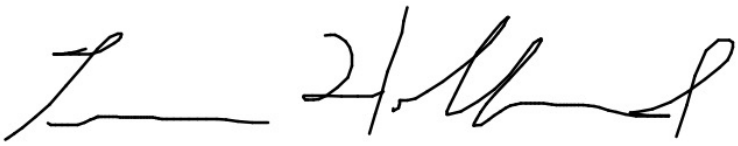
33. Drive End Seal P58

34. Opposite Drive End Seal P59

Rotor Inspection

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

36.	Growler Test	**(Pass) Pass**
37.	Number of Rotor Bars	
38.	Rotor Condition	**good**
39.	List the Parts needed for the Repair Below ***Bearings and seals***	
40.	Signature of Technician that Disassembled Motor	**Terrence. Holland**



Mechanical Fits- Rotor

41.	Shaft Runout	**0.001 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
1.5735	**1.5734**	**1.5735**

46.	Drive End Bearing Shaft Fit Condition	
47.	Opposite Drive End Bearing Shaft Fit	

0 Degrees	60 Degrees	120 Degrees
1.3786	**1.3785**	**1.3785**

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

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

54. Bearing Cap Condition

Drive End Bearing Cap	Opposite Drive End Bearing Cap
pass	**pass**

55. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

56. List Machine Work Needed Below

None

57. Technician **Terrence Holland**

Dynamic Balance Report

58. Rotor Weight and Balance Grade

Rotor Weight	Balance Grade

59. Initial Balance Readings

Drive End	Opposite Drive End

60. Final Balance Readings

Drive End	Opposite Drive End

61. Technician

Rewind

62. Core Test Results - Watts loss per Pound

Pre-Burnout	Post Burnout

63. Core Hot Spot Test

Pre-Burnout	Post-Burnout

64. Post Rewind Electrical Test- Insulation Resistance

65. Post Rewind Polarization Index

66. Post Rewind Winding Resistance

1-2	1-3	2-3

67. Post Rewind Surge Test

68.	Post Rewind Hi-Pot
69.	Technician

Root Cause of Failure

70.	Failure locations
71.	Root cause of failure

Mechanical Fits- Rotor - Post Repair

72.	Shaft Runout Post Repair
73.	Rotor Runout Post Repair

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

74.	Coupling Fit Closest to Bearing Housing Post Repair

0 Degrees	90 Degrees	120 Degrees

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

0 Degrees	60 Degrees	120 Degrees

76.	Drive End Bearing Shaft Fit Post Repair

0 Degrees	60 Degrees	120 Degrees

77.	Opposite Drive End Bearing Shaft Fit Post Repair

0 Degrees	60 Degrees	120 Degrees

78.	Shaft Air Seal Fits Post Repair

Drive End Air Seal	Opposite Drive End Air Seal

79.	Shaft Repair Sign-off

Mechanical Fits- Bearing Housings - Post Repair

80.	Drive End - Endbell Bearing Fit Post Repair

0 Degrees	60 Degrees	120 Degrees

81.	Opposite Drive End - Endbell Bearing Fit Post Repair

0 Degrees	60 Degrees	120 Degrees

82.	Bearing Cap Condition Post Repair

Drive End Bearing Cap	Opposite Drive End Bearing Cap

83.	End Bell Air Seal Fits Post Repair

Drive End Air Seal	Opposite Drive End Air Seal

84.	End Bell Repair Sign-off

Assembly

85.	Photograph All Major Components prior to assembly
86.	Final Insulation Resistance Test
87.	Assembled Shaft Endplay
88.	Assembled Shaft Runout

89.	Test Run Voltage		
	Volts	Volts	Volts
90.	Test Run Amperage		
	Amps	Amps	Amps
91.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
92.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
93.	Ambient Temperature - Fahrenheit		
94.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
95.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
96.	Final Test Run Sign-off		
97.	Document Final Condition with Pictures after paint		P2200

98. Final Pics and QC Review