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

AC Inspection as Found

Custom Craft Poultry
3064 E Main St
Batesville, AR 72501

FolderID: 101956
FormID: 18100043

AC Inspection - Rev. 2

Location:	Shop
Serial Number:	10853

Description:FMC FOODTECH GEARMOTOR 121.12 RATIO

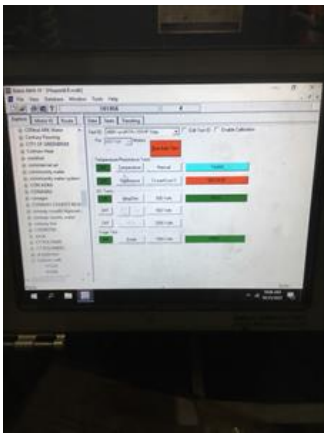
Hi-Speed Job Number:	101956
Manufacturer:	Other
Product Number:	117091X
Spec/ID #:	R83F/A
Serial Number:	10853
Voltage:	230 / 460
Phase:	Three
Hz:	60 (Hz)
Enclosure:	TEFC
J-box Included:	Complete
Coupling/Sheave:	Gear
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **1 - High** **6 - Good**

Overall Condition

1. Report Date **10/26/2023**
2. Nameplate Picture P37

3. Photos of all six sides of the machine. P45



	4.	Describe the Overall Condition of the Equipment as Received ***Serviceable***	
	5.	Distance from the end of the shaft to the Coupling/Sheave	**0 inches**

Initial Mechanical/Electrical

●	6.	Does Shaft Turn Freely?	**(Yes) Yes**	
	7.	Does Shaft Have Visible Damage?	**(No) No**	P20

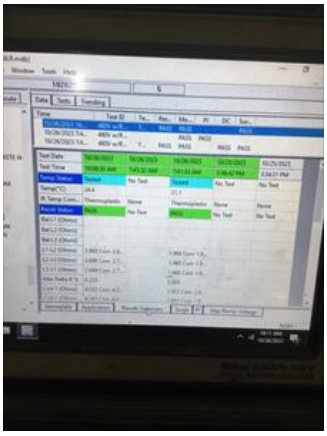
●	8.	Assembled Shaft Runout	**0.002 Inches**
	9.	Assembled Shaft End Play	**0 inches**
	10.	Air Gap Variation <10%	**na**
●	11.	Lead Condition	**(P) Pass**
	12.	Lead Length	**6 Inches**

13.	Lead Numbers	**1-9**	
14.	Frame Condition	**pass**	
15.	Fan Condition	**(N) NA**	
	Missing		
16.	Broken or Missing Components		
	Fan and fan cover missing.		

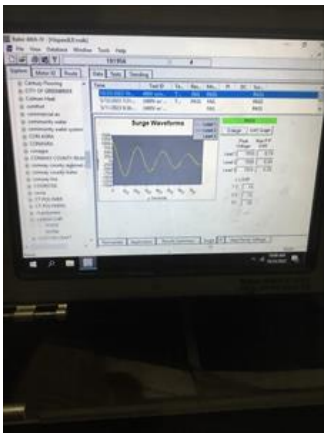
Initial Electrical Inspection

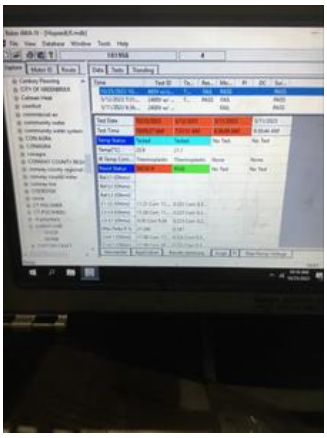
17.	Insulation Resistance/Megger	**Megohms**	P8

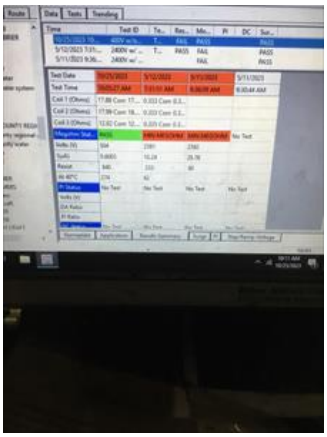
18.	Winding Resistance			P18
	1-2	1-3	2-3	
	2.693	**2.696**	**2.699**	

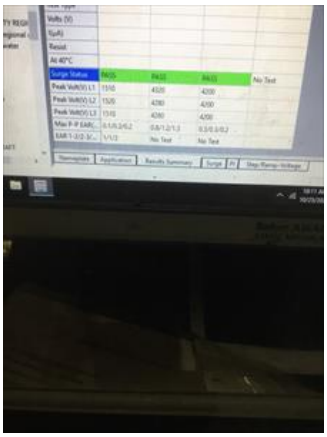


19.	Perform Surge Test	**(P) Pass**	P57
	Pass		









20.	Number of Stator Slots	**48**	
21.	Stator Condition	**pass**	
22.	Stator Thermistors/Ohms	**na**	
23.	Stator Overloads/Ohms	**na**	

Mechanical Inspection

24.	Drive End Bearing Brand	**NTN**	
25.	Drive End Bearing Number-	**6306**	P30

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?	**none**	

30.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**snap ring**	
31.	Drive End Bearing Condition	**replace**	
32.	Opposite Drive End Bearing Brand	**NTN**	
33.	Opposite Drive End Bearing Number-	**6205**	P90

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?	**none**	
38.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**na**	
39.	Opposite Drive End Bearing Condition	**replace**	
40.	Drive End Seal	**30*17*10 motor**	P102

*65*90*10 gearbox*

41.	Opposite Drive End Seal	**na**	

Rotor Inspection

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

43.	Growler Test	**(Pass) Pass**
44.	Number of Rotor Bars	**28**
45.	Rotor Condition	**pass**
46.	List the Parts needed for the Repair Below ***(1) Seal 30*17*10. (1) 205 end bell sleeve. (1) fan and fan cover.***	
47.	Signature of Technician that Disassembled Motor	**Terrence Holland**

Mechanical Fits- Rotor

48.	Shaft Runout	**0.002 inches**
49.	Rotor Runout	

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

50.	Coupling Fit Closest to Bearing Housing	

0 Degrees	90 Degrees	120 Degrees

51.	Coupling Fit Closest to the end of the Shaft	

0 Degrees	60 Degrees	120 Degrees

52.	Drive End Bearing Shaft Fit	

0 Degrees	60 Degrees	120 Degrees
1.1813	**1.1813**	**1.1813**

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

0 Degrees	60 Degrees	120 Degrees
0.9844000000000001	**0.9845**	**0.9843**

55.	Opposite Drive End Bearing Shaft Fit Condition	**(P) Pass**
56.	Shaft Air Seal Fits	

Drive End Air Seal	Opposite Drive End Air Seal

Mechanical Fits- Bearing Housings

57. Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees

58. Drive End - Endbell Bearing Fit Condition

59. Opposite Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees

60. Opposite Drive End - Endbell Bearing Fit Condition **(F) Fail** P41

Lip worn in, and excessive wear.

61. Bearing Cap Condition

Drive End Bearing Cap	Opposite Drive End Bearing Cap

Na

62. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

63. List Machine Work Needed Below

Machine ODE housing.

64. Technician **Terrence Holland**

Dynamic Balance Report

65. Rotor Weight and Balance Grade

Rotor Weight	Balance Grade

66. Initial Balance Readings

Drive End	Opposite Drive End

67. Final Balance Readings

Drive End	Opposite Drive End

68.	Technician		
Rewind			
69.	Core Test Results - Watts loss per Pound		
	Pre-Burnout	Post Burnout	
70.	Core Hot Spot Test		
	Pre-Burnout	Post-Burnout	
71.	Post Rewind Electrical Test- Insulation Resistance		
72.	Post Rewind Polarization Index		
73.	Post Rewind Winding Resistance		
	1-2	1-3	2-3
74.	Post Rewind Surge Test		
75.	Post Rewind Hi-Pot		
76.	Technician		
Root Cause of Failure			
77.	Failure locations		
78.	Root cause of failure		
Mechanical Fits- Rotor - Post Repair			
79.	Shaft Runout Post Repair		
80.	Rotor Runout Post Repair		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
81.	Coupling Fit Closest to Bearing Housing Post Repair		
	0 Degrees	90 Degrees	120 Degrees
82.	Coupling Fit Closest to the end of the Shaft Post Repair		
	0 Degrees	60 Degrees	120 Degrees
83.	Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
84.	Opposite Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
85.	Shaft Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
86.	Shaft Repair Sign-off		
Mechanical Fits- Bearing Housings - Post Repair			
87.	Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
88.	Opposite Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees

89.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
90.	End Bell Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
91.	End Bell Repair Sign-off		
Assembly			
92.	QC Check All Parts for Cleanliness Prior to Assembly		
93.	Photograph All Major Components prior to assembly		
94.	Final Insulation Resistance Test		
95.	Assembled Shaft Endplay		
96.	Assembled Shaft Runout		
97.	Test Run Voltage		
	Volts	Volts	Volts
98.	Test Run Amperage		
	Amps	Amps	Amps
99.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
100.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
101.	Ambient Temperature - Fahrenheit		
102.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
103.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
104.	Document Final Condition with Pictures after paint		
105.	Final Pics and QC Review		