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

AC Inspection as Found

Peco Foods (004801)
489 County Rd 142
Corning, AR 72422

FolderID: 154221
FormID: 22367723

AC Inspection - Rev. 2

Location:	Shop
Serial Number:	

Hi-Speed Job Number:	154221
Manufacturer:	WEG
Product Number:	L5010/11DZ
Spec/ID #:	1026776130
HP/kW:	783 (HP)
RPM:	3575 (RPM)
Voltage:	460
Current:	842 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	WPI
# of Leads:	6
J-box Included:	None
Coupling/Sheave:	None
Date Received:	11/22/2024
Bearing RTDs:	No
Stator RTDs:	Yes
Repair Stage:	Teardown Inspection
Heaters:	Yes
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **2 - High** **9 - Good**

Overall Condition

1.	Report Date	**11/22/2024**	
2.	Nameplate Picture		P2

3.	Photos of all six sides of the machine.		P3

	4.	Describe the Overall Condition of the Equipment as Received	
Initial Mechanical/Electrical			
●	5.	Does Shaft Turn Freely?	**(Y) Yes**
	6.	Does the shaft require T.I.R in Lathe to identify additional repairs?	
	7.	Does Shaft Have Visible Damage?	**(No) No**
	8.	Assembled Shaft Runout	**0.001 Inches**
	9.	Assembled Shaft End Play	**0.002 inches**
	10.	Air Gap Variation <10%	
●	11.	Lead Condition	**(P) Pass**
	12.	Lead Length	**52 Inches**

13.	Does it have Lugs?, If so what is the Stud Size?	**(Yes) Yes**	
	3/8"		
14.	Lead Numbers	**T1-T6**	
15.	Stator Temperature Detector Rating and Function		

Quantity	Rating	Quantity Passed
6	**100**	**6**

16.	Frame Condition	**good**	
17.	Fan Condition	**(P) Pass**	P19
	Internal on shaft		

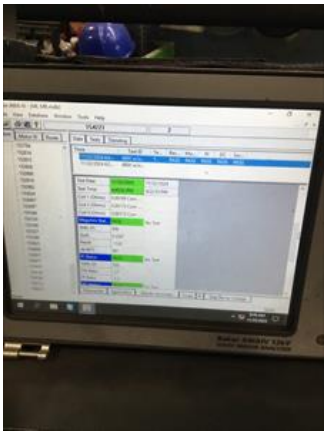
18.	Heater Quantity, Ratings		

Quantity	Volts/Watts	Pass/Fail
2	**240/173**	**pass**

19.	Broken or Missing Components	**yes**	P21
	Missing lifting eyes		

Initial Electrical Inspection

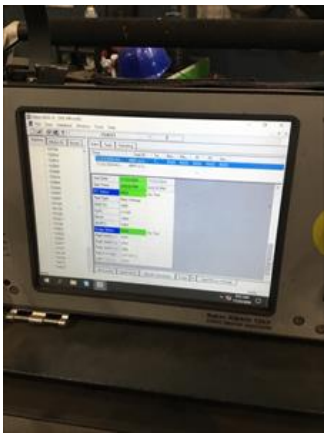
20.	Insulation Resistance/Megger	**481 Megohms**	P22



21.	Winding Resistance		

1-2	1-3	2-3
.00342	**.00346**	**.00342**

22.	Perform Surge Test	**(P) Pass**	P24



23.	Number of Stator Slots	**48**
24.	Stator Condition	**acceptable**
25.	Stator Thermistors/Ohms	**none**
26.	Stator Overloads/Ohms	**100 ohm rtd**

Mechanical Inspection

27.	Drive End Bearing Brand	**NCI**
28.	Drive End Bearing Number-	**6218 C4**
29.	Drive End Bearing Qty.	**1**
30.	Drive End Bearing Type	**(Ball) Ball Bearing**
31.	Drive End Lubrication Type	**(Grease) Grease Lubricated**
32.	Drive End Bearing Insulation or Grounding Device?	**none**
33.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**none**

Spacer

34. Drive End Bearing Condition P36

Spacer on end

35.	Opposite Drive End Bearing Brand	**NCI**
36.	Opposite Drive End Bearing Number-	**6218 C4**
37.	Opposite Drive End Bearing Qty.	**1**
38.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**
39.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**
40.	Opposite Drive End Bearing Insulation or Grounding Device?	**end bell is insulated** P42

41. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device? P43

Faces inside

42.	Opposite Drive End Bearing Condition		P44

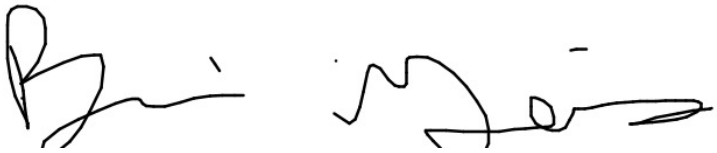
43.	Drive End Seal	**none**	
44.	Opposite Drive End Seal	**none**	

Rotor Inspection

45.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**	
46.	Growler Test		P56

47.	Number of Rotor Bars	**40**	
48.	Rotor Condition	**acceptable**	
49.	List the Parts needed for the Repair Below ***(2) 6218 C4 bearings***		

50. Signature of Technician that Disassembled Motor **Brian Goines**



Mechanical Fits- Rotor

51. Shaft Runout

52. Rotor Runout

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

53. Coupling Fit Closest to Bearing Housing

0 Degrees	90 Degrees	120 Degrees

54. Coupling Fit Closest to the end of the Shaft

0 Degrees	60 Degrees	120 Degrees

55. Drive End Bearing Shaft Fit P65

0 Degrees	60 Degrees	120 Degrees
3.5438	**3.5437**	**3.5437**

90mm = 3.5433 Pressfit tolerance is from 3.5434 to 3.5440

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

57. Opposite Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
3.5435	**3.5435**	**3.5436**

90mm = 3.5433 Pressfit tolerance is from 3.5434 to 3.5440

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

59. Shaft Air Seal Fits

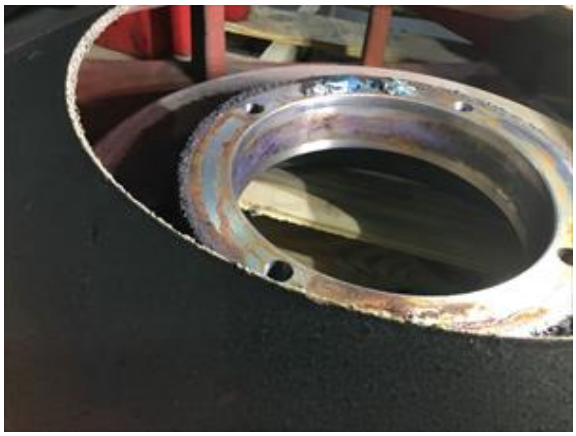
Drive End Air Seal	Opposite Drive End Air Seal

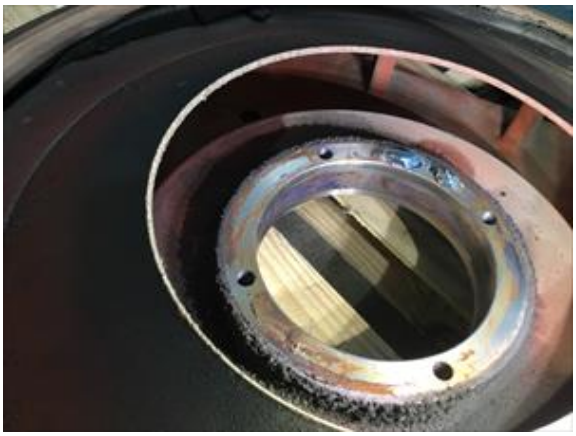
Mechanical Fits- Bearing Housings

60. Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
6.3002	**6.3012**	**6.3006**

160mm = 6.2992 Tolerance is from 6.2992 to 6.3002





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

62. Opposite Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
6.32	**6.322**	**6.305**

Bad the bearing has been spinning in its bore for a long time

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

64. Bearing Cap Condition

Drive End Bearing Cap	Opposite Drive End Bearing Cap

65. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

66. List Machine Work Needed Below

Both endbells need to be bored and bushed

67. Technician **Roger Ventrini**

Root Cause of Failure

68. Failure locations

69. Root cause of failure