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: 153781
FormID: 21753553

AC Inspection - Rev. 2

Completed by: JAMES VALENTINE on 09/30/2024

Location:	Default
Serial Number:	12W793Y49761

Description:20 Hp Motor

Hi-Speed Job Number:	153781
Manufacturer:	Baldor
Serial Number:	12W793Y49761
HP/kW:	20 (HP)
RPM:	880 (RPM)
Frame:	324LPZ
Voltage:	460
Current:	30 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
# of Leads:	3
J-box Included:	None
Coupling/Sheave:	None
Date Received:	09/26/2024
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Rewind:	No
Shaft Machined Fit Repairs Required:	Yes
Bearing Housing Machined Fit Repairs Required:	No
Heaters:	Yes
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **2 - Medium** **50 - Good**

Overall Condition

1.	Report Date	**09/26/2024**

2. Nameplate Picture P2

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

	4.	Describe the Overall Condition of the Equipment as Received ***Shaft damage*** Assigned To: Roger Ventrini	P4

	5.	Report Date [COPY]	
Initial Mechanical/Electrical			
	6.	Does Shaft Turn Freely?	**(Y) Yes**
	7.	Does the shaft require T.I.R in Lathe to identify additional repairs?	**(No) No**
	8.	Does Shaft Have Visible Damage?	**(Yes) Yes**
		Seal surface damaged	
	9.	Assembled Shaft Runout	**0.003 Inches**
	10.	Assembled Shaft End Play	**inches**
		N/a	
	11.	Air Gap Variation <10%	
	12.	Lead Condition	**(P) Pass**
	13.	Lead Length	**10 Inches**
	14.	Does it have Lugs?, If so what is the Stud Size?	
	15.	Lead Numbers	**1-3**
	16.	Frame Condition	**good**

17. Fan Condition **(P) Pass** P17

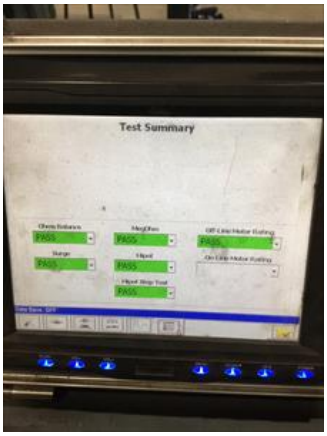
18. Heater Quantity, Ratings

Quantity	Volts/Watts	Pass/Fail
2		

19. Broken or Missing Components **none**

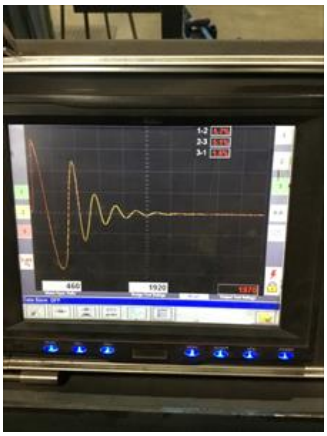
Initial Electrical Inspection

20. Insulation Resistance/Megger **92000 Megohms** P20



21.	Winding Resistance			P21
	1-2	1-3	2-3	

22.	Perform Surge Test	**(P) Pass**	P22



23.	Number of Stator Slots	**54**
24.	Stator Condition	**good**
25.	Stator Thermistors/Ohms	**n/a**
26.	Stator Overloads/Ohms	**n/a**

Mechanical Inspection

27.	Drive End Bearing Brand	**Skf**
28.	Drive End Bearing Number-	**3215a c3**
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**

34.	Drive End Bearing Condition	**good**	P34

35.	Opposite Drive End Bearing Brand	**ntn**	
36.	Opposite Drive End Bearing Number-	**6311 c3**	
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?	**none**	
41.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**wavy washer**	P41

42.	Opposite Drive End Bearing Condition	**good**	P42

43. Drive End Seal

N/a

44. Opposite Drive End Seal

N/a

Rotor Inspection

45.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**	
46.	Growler Test	**(Pass) Pass**	
47.	Number of Rotor Bars	**42**	
48.	Rotor Condition	**damage to seal surface**	P48

Shaft size is 3.9840 at largest diameter. And 58 inches long.

49. List the Parts needed for the Repair Below

1-3215 a c3 bearing
1-6311 c3 bearing
1- shaft replacement see measurements in rotor condition section

50. Signature of Technician that Disassembled Motor — **James Valentine**

Mechanical Fits- Rotor

51.	Shaft Runout	**0.003 inches**

52. Rotor Runout

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

N/a

53. Coupling Fit Closest to Bearing Housing

0 Degrees	90 Degrees	120 Degrees

N/a

54. Coupling Fit Closest to the end of the Shaft

0 Degrees	60 Degrees	120 Degrees

N/a

55. Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
2.9535	**2.9535**	**2.9535**

2.9534/2.9529

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

57. Opposite Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
2.1655	**2.1655**	**2.1655**

2.1660/2.1655

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

59. Shaft Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

N/a

Mechanical Fits- Bearing Housings

60. Drive End - Endbell Bearing Fit

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

5.1191/5.1181

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

62. Opposite Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
4.725	**4.725**	**4.725**

4.7244/4.7253

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

64. Bearing Cap Condition

Drive End Bearing Cap	Opposite Drive End Bearing Cap
good	**good**

65. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

N/a

66. List Machine Work Needed Below

Shaft press out,cut, and press in.

67. Technician **James Valentine**

Root Cause of Failure

68. Failure locations

Shaft damage.

69. Root cause of failure

N/a