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

AC Inspection as Found

Peco Foods
625 S. Allen Street
Batesville, AR 72501

FolderID: 102854
FormID: 20233519

AC Inspection - Rev. 2

Location:	Shop
Serial Number:	1609937022
Description:	HOWDEN ROTARY BLOWER

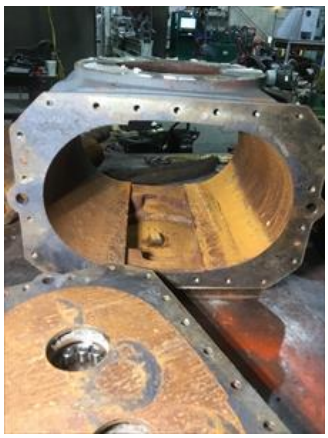
Hi-Speed Job Number:	102854
Manufacturer:	Other
Spec/ID #:	851470TR
Serial Number:	1609937022
# of Leads:	Other
J-box Included:	None
Coupling/Sheave:	Gear
Date Received:	04/29/2024
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Rewind:	No
Shaft Machined Fit Repairs Required:	No
Bearing Housing Machined Fit Repairs Required:	No
Heaters:	No
Bearing Type:	Rolling Element

Priorities Found: **2 - High** **7 - Good**

Overall Condition

1.	Report Date	**05/15/2023**
2.	Nameplate Picture	P37

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



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

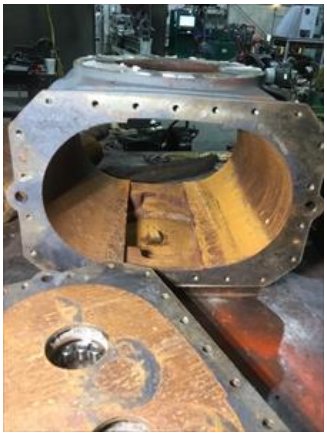
Initial Mechanical/Electrical

6.	Does Shaft Turn Freely?	**(N) No**
7.	Does the shaft require T.I.R in Lathe to identify additional repairs?	**(Yes) Yes**
	Seal surface repair.	
8.	Does Shaft Have Visible Damage?	**(No) No**
9.	Assembled Shaft Runout	**Inches**
	Na	
10.	Assembled Shaft End Play	**inches**
	Na	
11.	Air Gap Variation <10%	
	Na	
12.	Lead Condition	**(NA) Not Applicable**
13.	Lead Length	**Inches**
	Na	
14.	Does it have Lugs?, If so what is the Stud Size?	**(No) No**
15.	Lead Numbers	
	Na	
16.	Frame Condition	**rusted**
17.	Fan Condition	**(N) NA**
18.	Broken or Missing Components	
	3 ea bearings were missing locking miniature ball bearings that fit in bearing grooves.	

Initial Electrical Inspection

19.	Insulation Resistance/Megger			**Megohms**
	Na			
20.	Winding Resistance			
	1-2	1-3	2-3	
	Na			
21.	Perform Surge Test			**(NA) Not Applicable**
22.	Number of Stator Slots			
	Na			

23.	Stator Condition	**rusted**	P84
	Requires extensive cleaning		



24.	Stator Thermistors/Ohms	
	Na	
25.	Stator Overloads/Ohms	
	Na	

Mechanical Inspection

26.	Drive End Bearing Brand	**Romania ENSO URB**
27.	Drive End Bearing Number-	**NJ311 EN1C3SO**
28.	Drive End Bearing Qty.	
	2	
29.	Drive End Bearing Type	**(Roller) Roller Bearing**
30.	Drive End Lubrication Type	**(Oil) Oil Lubricated**
31.	Drive End Bearing Insulation or Grounding Device?	
	Na	
32.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**wavy washers**
33.	Drive End Bearing Condition	**rusted** P82

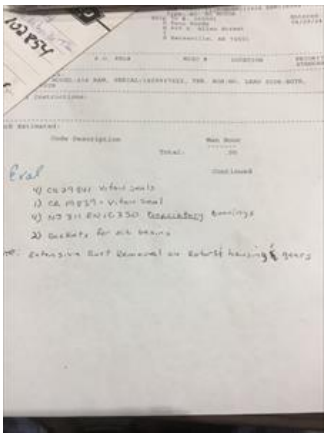
34.	Opposite Drive End Bearing Brand	**Romania ENSO URB**
35.	Opposite Drive End Bearing Number-	**NJ311 EN1C3SO**
36.	Opposite Drive End Bearing Qty.	**2**
37.	Opposite Drive End Bearing Type	**(Roller) Roller Bearing**
38.	Opposite Drive End Lubrication Type	**(Oil) Oil Lubricated**

39.	Opposite Drive End Bearing Insulation or Grounding Device?		
	None		
40.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**wavy washers**	
41.	Opposite Drive End Bearing Condition	**rusted**	P118

42.	Drive End Seal		
	2) CR 29841 Viton seals ***1) 19839 Viton seal***		
43.	Opposite Drive End Seal	**2) 29841 Viton seals**	

Rotor Inspection

44.	Rotor Type/Material		
	Blower rotors.		
45.	Growler Test		
	Na		
46.	Number of Rotor Bars		
	Na		
47.	Rotor Condition	**rusted**	
48.	List the Parts needed for the Repair Below		P47
	See photo		



49.	Signature of Technician that Disassembled Motor	**Terrence. Holland**

Witness:RRW

Mechanical Fits- Rotor

50.	Shaft Runout	**0.002 inches**
51.	Rotor Runout	

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

Na

52. Coupling Fit Closest to Bearing Housing

0 Degrees	90 Degrees	120 Degrees

Na

53. Coupling Fit Closest to the end of the Shaft

0 Degrees	60 Degrees	120 Degrees

Na

54. Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees

2.1663, 2.1661, 2.1663 (rotor1)
2.1664, 2.1663, 2.1664 (rotor2)

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

0 Degrees	60 Degrees	120 Degrees

2.1661, 2.1662, 2.1662 (rotor1)
2.1662, 2.1661, 2.1662 (rotor2)

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

Drive End Air Seal	Opposite Drive End Air Seal

Na

Mechanical Fits- Bearing Housings

59. Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees

4.7256, 4.7256, 4.7254 (Right side)
4.7254, 4.7255, 4.7255 (Left side)

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

0 Degrees	60 Degrees	120 Degrees

4.7254, 4.7255, 4.7255 (Right side)
4.7250, 4.7252, 4.7253 (Left side)

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

Na

64.	End Bell Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	

Na

65. List Machine Work Needed Below — P67

Seal surface requires Polish/repair due to excessive rust.

66. Technician — **Terrence Holland**

Witness:

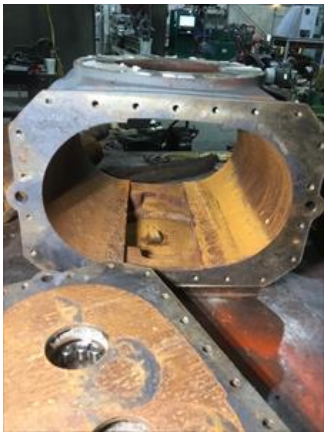
Root Cause of Failure

67. Failure locations

Bearings, rotors, & housing.

68. Root cause of failure

Entire oil basin on both ends contained nothing but water. Unit is completely coated internally with rust.



Dynamic Balance Report

69. Rotor Weight and Balance Grade

Rotor Weight	Balance Grade

70. Initial Balance Readings

Drive End	Opposite Drive End

71. Final Balance Readings

Drive End	Opposite Drive End

72. Technician

Assembly

73. QC Check All Parts for Cleanliness Prior to Assembly

74. Photograph All Major Components prior to assembly

75. Final Insulation Resistance Test

76. Assembled Shaft Endplay

77. Assembled Shaft Runout

78. Test Run Voltage

Volts	Volts	Volts

79.	Test Run Amperage		
	Amps	Amps	Amps
80.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
81.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
82.	Ambient Temperature - Fahrenheit		
83.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
84.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
85.	Stator Temperatures- Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
86.	Document Final Condition with Pictures after paint		
87.	Final Pics and QC Review		