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

AC Inspection as Found

Amcor (010764)
3033 East 16th St.
Russellville, AR 72802

FolderID: 103478
FormID: 21536197

AC Inspection - Rev. 2

Location:	LITTLE ROCK MOTOR SHOP
Serial Number:	160009
Description:	2.2KW HEBEI W/ GARDNER DENVER PUMP

Hi-Speed Job Number:	103478
Manufacturer:	Other
Product Number:	M: ITT0G1ACCCNE08C000
Spec/ID #:	PART: 10102105100
Serial Number:	160009
HP/kW:	2.2 (kW)
Voltage:	230 / 460
Phase:	Three
Hz:	60 (Hz)
Repair Stage:	Final

Priorities Found: **6 - High** **5 - Good**

Overall Condition

1. Report Date **09/11/2024**
2. Nameplate Picture P37

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

	4.	Describe the Overall Condition of the Equipment as Received ***Needs rebuilt***	
	5.	Distance from the end of the shaft to the Coupling/Sheave ***Na***	**inches**
	6.	Report Date [COPY]	**09/23/2024**
Initial Mechanical/Electrical			
	7.	Does Shaft Turn Freely?	**(Y) Yes**
	8.	Does the shaft require T.I.R in Lathe to identify additional repairs?	**(No) No**
	9.	Does Shaft Have Visible Damage?	**(No) No**
	10.	Assembled Shaft Runout	**0.001 Inches**
	11.	Assembled Shaft End Play	**0 inches**
	12.	Air Gap Variation <10% ***Na***	
	13.	Lead Condition	**(P) Pass**
	14.	Lead Length	**3 Inches**
	15.	Does it have Lugs?, If so what is the Stud Size? ***Same size as wire***	**(Yes) Yes**
	16.	Lead Numbers	**1-9**
	17.	Stator Temperature Detector Rating and Function	

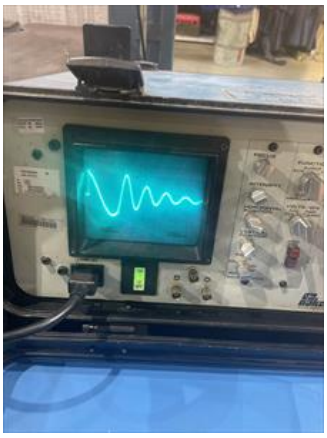
Quantity	Rating	Quantity Passed

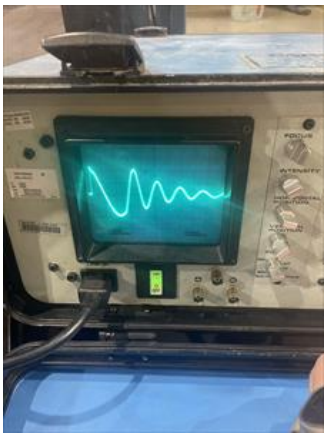
Na

18.	Bearing Temperature Detector Rating and Function			
	Quantity	Rating	Quantity Passed	
	Na			
19.	Frame Condition			**pass**
20.	Fan Condition			**(P) Pass**
21.	Heater Quantity, Ratings			
	Quantity	Volts/Watts	Pass/Fail	
	Na			
22.	Broken or Missing Components			
	No			

Initial Electrical Inspection

23.	Insulation Resistance/Megger			**2000 Megohms**
24.	Winding Resistance			
	1-2	1-3	2-3	
	0.2	**0.2**	**0.2**	
25.	Perform Surge Test			**(P) Pass** P57





26.	Number of Stator Slots			**36**
27.	Stator Condition			**good**
28.	Stator Thermistors/Ohms			**na**
29.	Stator Overloads/Ohms			**na**

Mechanical Inspection

30.	Drive End Bearing Brand	**c&u**
31.	Drive End Bearing Number-	**6206z**
32.	Drive End Bearing Qty.	**1**
33.	Drive End Bearing Type	**(Ball) Ball Bearing**
34.	Drive End Lubrication Type	**(Grease) Grease Lubricated**
35.	Drive End Bearing Insulation or Grounding Device?	**no**
36.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**snap ring**
37.	Drive End Bearing Condition	**worn**
38.	Opposite Drive End Bearing Brand	**c&u**
39.	Opposite Drive End Bearing Number-	**6206z**
40.	Opposite Drive End Bearing Qty.	**1**
41.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**
42.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**
43.	Opposite Drive End Bearing Insulation or Grounding Device?	**no**
44.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**wavy washer**
45.	Opposite Drive End Bearing Condition	**worn**
46.	Drive End Seal	**na**
47.	Opposite Drive End Seal	**na**

48. DE Sleeve Bearing Inside Diameter

0 degrees	120 degrees	240 degrees

Na

49. DE Sleeve Bearing Outside Diameter

0 degrees	120 degrees	240 degrees

Na

50. DE Sleeve Bearing Housing Inside Diameter

0 degrees	120 degrees	240 degrees

Na

51. DE Sleeve Bearing to Housing Clearance

0 degrees	120 degrees	240 degrees

Na

52. ODE Sleeve Bearing Inside Diameter

0 degrees	120 degrees	240 degrees

Na

53. ODE Sleeve Bearing Outside Diameter

0 degrees	120 degrees	240 degrees

Na

54. ODE Sleeve Bearing Housing Inside Diameter

0 degrees	120 degrees	240 degrees

Na

55. ODE Sleeve Bearing to Housing Clearance

0 degrees	120 degrees	240 degrees

Na

Rotor Inspection

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

57. Growler Test — **(Pass) Pass**

58. Number of Rotor Bars — **32**

59. Rotor Condition

Good

60. List the Parts needed for the Repair Below

6206z x2
New seal
New retaining bolt

61. Signature of Technician that Disassembled Motor — **Trevor Hall**

Mechanical Fits- Rotor

62. Shaft Runout — **0.001 inches**

63. Rotor Runout

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

Good

64. Coupling Fit Closest to Bearing Housing

0 Degrees	90 Degrees	120 Degrees
1.125	**1.125**	**1.125**

65. Coupling Fit Closest to the end of the Shaft

0 Degrees	60 Degrees	120 Degrees
1.125	**1.125**	**17125**

66. Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
1.1809	**1.1809**	**1.1809**

67. Drive End Bearing Shaft Fit Condition — **(F) Fail**

Undersize

68. Opposite Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
1.1808	**1.1808**	**1.1808**

69. Opposite Drive End Bearing Shaft Fit Condition — **(F) Fail**

Undersize

70. Shaft Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal
good	**good**

Mechanical Fits- Bearing Housings

71. Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
2.4418	**2.4418**	**2.4418**

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

Oversized

73. Opposite Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
2.4431	**2.4435**	**2.4424**

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

Egg shape

75. Bearing Cap Condition

Drive End Bearing Cap	Opposite Drive End Bearing Cap
good	

76. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal
good	**good**

77. List Machine Work Needed Below

Both shaft fits, both endbells. Drive endbell is only .0002 over max

78. Technician **Trevor Hall**

Root Cause of Failure

79. Failure locations

Seals, bearings, retaining bolt.

80. Root cause of failure

Seal came apart

Dynamic Balance Report

81. Rotor Weight and Balance Grade

Rotor Weight	Balance Grade

82. Initial Balance Readings

Drive End	Opposite Drive End

83. Final Balance Readings

Drive End	Opposite Drive End

84. Technician

Rewind

85. Core Test Results - Watts loss per Pound

Pre-Burnout	Post Burnout

86. Core Hot Spot Test

Pre-Burnout	Post-Burnout

87.	Post Rewind Electrical Test- Insulation Resistance		
88.	Post Rewind Polarization Index		
89.	Post Rewind Winding Resistance		
	1-2	1-3	2-3
90.	Post Rewind Surge Test		
91.	Post Rewind Hi-Pot		
92.	Technician		

Mechanical Fits- Rotor - Post Repair

93.	Shaft Runout Post Repair		
94.	Rotor Runout Post Repair		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
95.	Coupling Fit Closest to Bearing Housing Post Repair		
	0 Degrees	90 Degrees	120 Degrees
96.	Coupling Fit Closest to the end of the Shaft Post Repair		
	0 Degrees	60 Degrees	120 Degrees
97.	Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
98.	Opposite Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
99.	Shaft Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
100.	Shaft Repair Sign-off		

Mechanical Fits- Bearing Housings - Post Repair

101.	Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
102.	Opposite Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
103.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
104.	End Bell Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
105.	DE Sleeve Bearing Inside ID Post Repair		
	Measure 1	Measure 2	Measure 3

106.	DE Sleeve Bearing Outside ID Post Repair		
	Measure 1	Measure 2	Measure 3
107.	DE Sleeve Bearing Inside OD Post Repair		
	Measure 1	Measure 2	Measure 3
108.	DE Sleeve Bearing Outside OD Post Repair		
	Measure 1	Measure 2	Measure 3
109.	End Bell Repair Sign-off		
110.	ODE Sleeve Bearing Inside ID Post Repair		
	Measure 1	Measure 2	Measure 3
111.	ODE Sleeve Bearing Outside ID Post Repair		
	Measure 1	Measure 2	Measure 3
112.	ODE Sleeve Bearing Inside OD Post Repair		
	Measure 1	Measure 2	Measure 3
113.	ODE Sleeve Bearing Outside OD Post Repair		
	Measure 1	Measure 2	Measure 3

Assembly

114.	QC Check All Parts for Cleanliness Prior to Assembly		
115.	Photograph All Major Components prior to assembly		
116.	Final Insulation Resistance Test		
117.	Assembled Shaft Endplay		
118.	Assembled Shaft Runout		
119.	Test Run Voltage		
	Volts	Volts	Volts
120.	Test Run Amperage		
	Amps	Amps	Amps
121.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
122.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
123.	Ambient Temperature - Fahrenheit		
124.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
125.	Drive End Bearing Temps - Fahrenheit 20-30 Minutes		
	20 Minutes	25 Minutes	30 Minutes

126.	Drive End Bearing Temps - Fahrenheit 35-45 Minutes		
	35 Minutes	40 Minutes	45 Minutes
127.	Drive End Bearing Temps - Fahrenheit 50-60 Minutes		
	50 Minutes	55 Minutes	60 Minutes
128.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
129.	Opposite Drive End Bearing Temps - Fahrenheit 20-30 Minutes		
	20 Minutes	25 Minutes	30 Minutes
130.	Opposite Drive End Bearing Temps - Fahrenheit 35-45 Minutes		
	35 Minutes	40 Minutes	45 Minutes
131.	Opposite Drive End Bearing Temps - Fahrenheit 50-60 Minutes		
	50 Minutes	55 Minutes	60 Minutes
132.	Stator Temperatures- Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
133.	Stator Temperatures- Fahrenheit 20-30 Minutes		
	20 Minutes	25 Minutes	30 Minutes
134.	Stator Temperatures- Fahrenheit 35-45 Minutes		
	35 Minutes	40 Minutes	45 Minutes
135.	Stator Temperatures- Fahrenheit 50-60 Minutes		
	50 Minutes	55 Minutes	60 Minutes
136.	Document Final Condition with Pictures after paint		
137.	Final Pics and QC Review		