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

AC Inspection as Found

Twin Rivers
1701 Jefferson Parkway
White Hall, AR 71602

FolderID: 101591
FormID: 17262604

AC Inspection - Rev. 2

Location:	MOTOR SHOP LR
Serial Number:	104911
Description:	350HP GE 900RPM 8266/8288S

Hi-Speed Job Number:	101591
Manufacturer:	GE
Serial Number:	104911
HP/kW:	350 (HP)
RPM:	885 (RPM)
Frame:	8266/8288S
Voltage:	2300
Current:	85
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	ODP
J-box Included:	Complete
Repair Stage:	Final
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **2 - High** **6 - Good**

Overall Condition

1. Report Date
2. Nameplate Picture — P35

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	
Initial Mechanical/Electrical			
●	6.	Does Shaft Turn Freely?	**(Yes) Yes**
	7.	Does Shaft Have Visible Damage?	**(No) No**
●	8.	Assembled Shaft Runout	**0.002 Inches**
	9.	Assembled Shaft End Play	
	10.	Air Gap Variation <10%	

11.	Lead Condition	**(P) Pass**	P55

12.	Lead Length	**17.5 Inches**
13.	Lead Numbers	**1-3**

14. Stator Temperature Detector Rating and Function

Quantity	Rating	Quantity Passed

15. Bearing Temperature Detector Rating and Function

Quantity	Rating	Quantity Passed

None

16.	Frame Condition	**pass**
17.	Fan Condition	**(N) NA**
18.	Broken or Missing Components	**none**

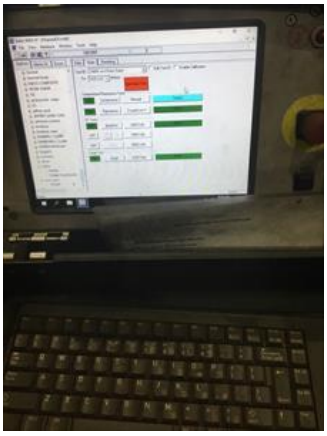
Initial Electrical Inspection

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

20. Winding Resistance

1-2	1-3	2-3

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



22.	Number of Stator Slots	**72 Megohms**	
23.	Stator Condition	**dirty**	
24.	Stator Thermistors/Ohms	**none**	
25.	Stator Overloads/Ohms	**none**	

Mechanical Inspection

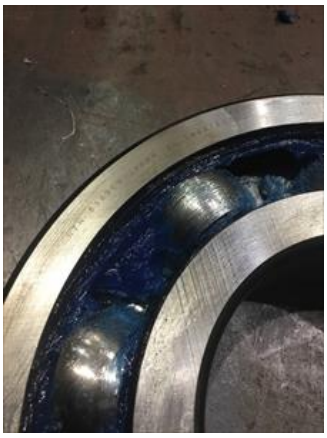
26.	Drive End Bearing Brand	**NTN**	
27.	Drive End Bearing Number-	**6324 C3**	P33

28.	Drive End Bearing Qty.	**1**	

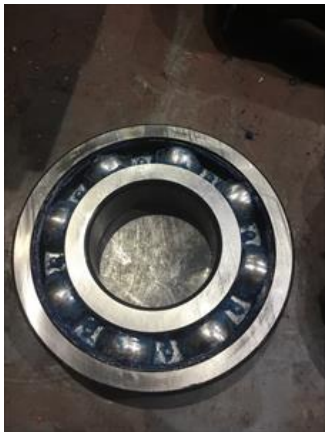
29.	Drive End Bearing Type	**(Ball) Ball Bearing**	P49

30.	Drive End Lubrication Type	**(Grease) Grease Lubricated**	
31.	Drive End Bearing Insulation or Grounding Device?	**none**	
32.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**star washer & locking ring**	P73

33.	Drive End Bearing Condition	**replace**	
34.	Opposite Drive End Bearing Brand	**NTN**	
35.	Opposite Drive End Bearing Number-	**6322 C3**	P91



36.	Opposite Drive End Bearing Qty.	**1**	
37.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**	P95



38.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**
39.	Opposite Drive End Bearing Insulation or Grounding Device?	**none**

40.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**Star washer and locking ring.**	P101

41.	Opposite Drive End Bearing Condition	**replace**
42.	Drive End Seal	**one**
43.	Opposite Drive End Seal	

Rotor Inspection

44.	Rotor Type/Material	**(Copper Barred) Copper Barred Rotor**
45.	Growler Test	
46.	Number of Rotor Bars	**86**
47.	Rotor Condition	**pass**
48.	List the Parts needed for the Repair Below	
49.	Signature of Technician that Disassembled Motor	**Terrence Holland**

Mechanical Fits- Rotor

50. Shaft Runout

51. Rotor Runout

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

52. Coupling Fit Closest to Bearing Housing

0 Degrees	90 Degrees	120 Degrees

53. Coupling Fit Closest to the end of the Shaft

0 Degrees	60 Degrees	120 Degrees

54.	Drive End Bearing Shaft Fit			P75
	0 Degrees	60 Degrees	120 Degrees	
	4.7244	**4.7251**		

Lip worn in

55.	Drive End Bearing Shaft Fit Condition	**(F) Fail**	P77

56.	Opposite Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
	4.3311	**4.3312**	**4.331**	
57.	Opposite Drive End Bearing Shaft Fit Condition		**(P) Pass**	
58.	Shaft Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		

Mechanical Fits- Bearing Housings

59.	Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	10.2373	**10.2375**	**10.2376**	

60. Drive End - Endbell Bearing Fit Condition **(F) Fail** P12

Heavy pitting

61. Opposite Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
9.449199999999999	**9.4491**	**9.449299999999999**

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

63. Bearing Cap Condition P51

Drive End Bearing Cap	Opposite Drive End Bearing Cap
pass	**pass**

64. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

65. List Machine Work Needed Below

D.E. Shaft fit bad. Has lip worn in. D.E housing fit has excessive pitting.

66. Technician **Terrence Holland**

Dynamic Balance Report

67. Rotor Weight and Balance Grade

Rotor Weight	Balance Grade

68. Initial Balance Readings

Drive End	Opposite Drive End

69. Final Balance Readings

Drive End	Opposite Drive End

70. Technician

Rewind

71. Core Test Results - Watts loss per Pound

Pre-Burnout	Post Burnout

72. Core Hot Spot Test

Pre-Burnout	Post-Burnout

73. Post Rewind Electrical Test- Insulation Resistance

74. Post Rewind Polarization Index

75. Post Rewind Winding Resistance

1-2	1-3	2-3

76. Post Rewind Surge Test

77. Post Rewind Hi-Pot

78. Technician

Root Cause of Failure

79. Failure locations

80. Root cause of failure

Mechanical Fits- Rotor - Post Repair

81. Shaft Runout Post Repair

82. Rotor Runout Post Repair

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

83.	Coupling Fit Closest to Bearing Housing Post Repair		
	0 Degrees	90 Degrees	120 Degrees
84.	Coupling Fit Closest to the end of the Shaft Post Repair		
	0 Degrees	60 Degrees	120 Degrees
85.	Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
86.	Opposite Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
87.	Shaft Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
88.	Shaft Repair Sign-off		
Mechanical Fits- Bearing Housings - Post Repair			
89.	Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
90.	Opposite Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
91.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
92.	End Bell Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
93.	End Bell Repair Sign-off		
Assembly			
94.	QC Check All Parts for Cleanliness Prior to Assembly		
95.	Photograph All Major Components prior to assembly		
96.	Final Insulation Resistance Test		
97.	Assembled Shaft Endplay		
98.	Assembled Shaft Runout		
99.	Test Run Voltage		
	Volts	Volts	Volts
100.	Test Run Amperage		
	Amps	Amps	Amps
101.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial

102.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
103.	Ambient Temperature - Fahrenheit		
104.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
105.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
106.	Document Final Condition with Pictures after paint		
107.	Final Pics and QC Review		