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

AC Inspection as Found

Ring Container Technologies (11634)
9000 Frazier Pike
Little Rock, AR 72206

FolderID: 101361
FormID: 16793326

AC Inspection - Rev. 2

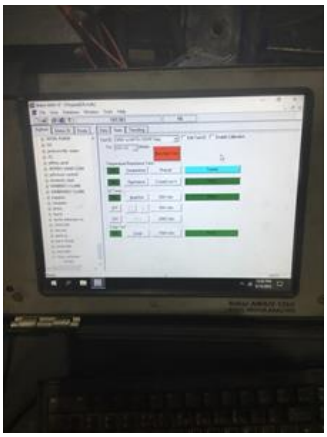
Location:	LR MOTOR SHOP
Serial Number:	01192
Description:	10HP SAMA BLOWER 3600RPM 132

Hi-Speed Job Number:	101361
Manufacturer:	Other
Product Number:	132
Serial Number:	01192
HP/kW:	10 (HP)
RPM:	3428 (RPM)
Frame:	132
Voltage:	460
Current:	15
Phase:	Three
Hz:	60 (Hz)
Enclosure:	TEFC
J-box Included:	Complete
Coupling/Sheave:	Propeller
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **3 - High** **5 - Good**

Overall Condition

1. Report Date
2. Nameplate Picture P37



	3.	Photos of all six sides of the machine.	
	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?		
	8.	Assembled Shaft Runout		
	9.	Assembled Shaft End Play		
	10.	Air Gap Variation <10%		
●	11.	Lead Condition	**(P) Pass**	P55

	12.	Lead Length	**6 Inches**
	13.	Frame Condition	**pass**

14.	Fan Condition	**(P) Pass**	P94

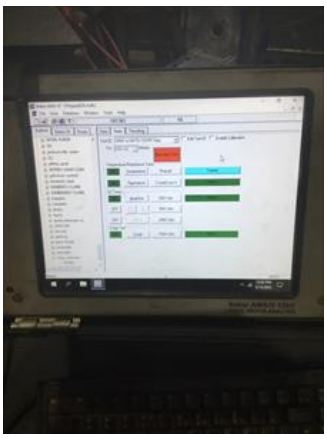
15.	Broken or Missing Components	**2 front plate mount bolts**

Initial Electrical Inspection

16.	Insulation Resistance/Megger	**Megohms**
17.	Winding Resistance	

1-2	1-3	2-3

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



19.	Number of Stator Slots	
20.	Stator Condition	**pass**
21.	Stator Thermistors/Ohms	
22.	Stator Overloads/Ohms	

Mechanical Inspection

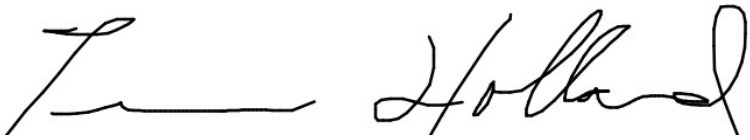
23.	Drive End Bearing Brand	
24.	Drive End Bearing Number-	**6208**
25.	Drive End Bearing Qty.	**1**
26.	Drive End Bearing Type	**(Ball) Ball Bearing**
27.	Drive End Lubrication Type	**(Grease) Grease Lubricated**
28.	Drive End Bearing Insulation or Grounding Device?	**none**
29.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**yes**
30.	Drive End Bearing Condition	**replace**
31.	Opposite Drive End Bearing Brand	
32.	Opposite Drive End Bearing Number-	**6208**

33.	Opposite Drive End Bearing Qty.	**1**
34.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**
35.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**
36.	Opposite Drive End Bearing Insulation or Grounding Device?	**none**
37.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**none**
38.	Opposite Drive End Bearing Condition	**replace**
39.	Drive End Seal	**40*58*8**
40.	Opposite Drive End Seal	**40*58*8**

Rotor Inspection

41.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**	P3

42.	Growler Test	**(Pass) Pass**
43.	Number of Rotor Bars	
44.	Rotor Condition	**pass**
45.	List the Parts needed for the Repair Below	
46.	Signature of Technician that Disassembled Motor	**Terrence Holland**



Mechanical Fits- Rotor

47.	Shaft Runout	**0.001 inches**
48.	Rotor Runout	

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

49.	Coupling Fit Closest to Bearing Housing	

0 Degrees	90 Degrees	120 Degrees

50.	Coupling Fit Closest to the end of the Shaft	

0 Degrees	60 Degrees	120 Degrees

51.	Drive End Bearing Shaft Fit	

0 Degrees	60 Degrees	120 Degrees
1.5746	**1.5747**	**1.5746**

52.	Drive End Bearing Shaft Fit Condition			**(F) Fail**
53.	Opposite Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
	1.5747	**1.5748**	**1.5747**	
54.	Opposite Drive End Bearing Shaft Fit Condition			**(F) Fail**
55.	Shaft Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		

Mechanical Fits- Bearing Housings

56.	Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	3.1486	**3.1485**	**31486**	
57.	Drive End - Endbell Bearing Fit Condition			**(F) Fail**
58.	Opposite Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	3.15	**31.498**	**3.1501**	
59.	Opposite Drive End - Endbell Bearing Fit Condition			**(P) Pass**
60.	Bearing Cap Condition			
	Drive End Bearing Cap	Opposite Drive End Bearing Cap		
61.	End Bell Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		
62.	List Machine Work Needed Below			
	Both shaft fits bad, D.E housing fit measures too small.			
63.	Technician			**Terrence Holland**

Dynamic Balance Report

64.	Rotor Weight and Balance Grade		
	Rotor Weight	Balance Grade	
65.	Initial Balance Readings		
	Drive End	Opposite Drive End	
66.	Final Balance Readings		
	Drive End	Opposite Drive End	
67.	Technician		

Rewind

68.	Core Test Results - Watts loss per Pound		
	Pre-Burnout	Post Burnout	

69.	Core Hot Spot Test		
	Pre-Burnout	Post-Burnout	
70.	Post Rewind Electrical Test- Insulation Resistance		
71.	Post Rewind Polarization Index		
72.	Post Rewind Winding Resistance		
	1-2	1-3	2-3
73.	Post Rewind Surge Test		
74.	Post Rewind Hi-Pot		
75.	Technician		

Root Cause of Failure

76.	Failure locations		
77.	Root cause of failure		

Mechanical Fits- Rotor - Post Repair

78.	Shaft Runout Post Repair		
79.	Rotor Runout Post Repair		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
80.	Coupling Fit Closest to Bearing Housing Post Repair		
	0 Degrees	90 Degrees	120 Degrees
81.	Coupling Fit Closest to the end of the Shaft Post Repair		
	0 Degrees	60 Degrees	120 Degrees
82.	Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
83.	Opposite Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
84.	Shaft Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
85.	Shaft Repair Sign-off		

Mechanical Fits- Bearing Housings - Post Repair

86.	Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
87.	Opposite Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
88.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	

89.	End Bell Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
90.	End Bell Repair Sign-off		
Assembly			
91.	QC Check All Parts for Cleanliness Prior to Assembly		
92.	Photograph All Major Components prior to assembly		
93.	Final Insulation Resistance Test		
94.	Assembled Shaft Endplay		
95.	Assembled Shaft Runout		
96.	Test Run Voltage		
	Volts	Volts	Volts
97.	Test Run Amperage		
	Amps	Amps	Amps
98.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
99.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
100.	Ambient Temperature - Fahrenheit		
101.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
102.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
103.	Document Final Condition with Pictures after paint		
104.	Final Pics and QC Review		