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

AC Inspection as Found

Georges Inc
1810 S. St. Louis Street
Batesville, AR 72501

FolderID: 101926
FormID: 18054633

AC Inspection - Rev. 2

Location:	Shop
Serial Number:	NO SN
Description:	75HP BALDOR 1800RPM 365TS

Hi-Speed Job Number:	101926
Manufacturer:	Baldor
Product Number:	EM4316TS
Spec/ID #:	A36-0005-4148
HP/kW:	75 (HP)
RPM:	1780 (RPM)
Frame:	365TS
Voltage:	230 / 460
Current:	174/87
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
# of Leads:	9
J-box Included:	Complete
Coupling/Sheave:	None
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Rewind:	No
Shaft Machined Fit Repairs Required:	No
Bearing Housing Machined Fit Repairs Required:	No
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

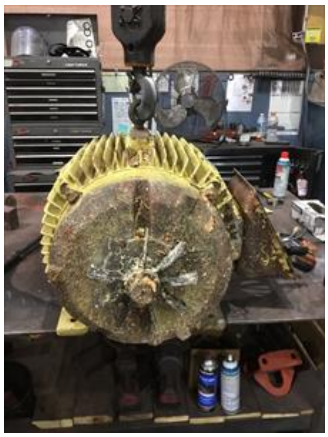
Priorities Found: **1 - High** **8 - Good**

Overall Condition

1.	Report Date	**10/11/2023**

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.***	
Initial Mechanical/Electrical			
	5.	Does Shaft Turn Freely?	**(Yes) Yes**
	6.	Does Shaft Have Visible Damage?	**(No) No** P20

	7.	Assembled Shaft Runout	**0.002 Inches**
	8.	Assembled Shaft End Play	**0 inches**
	9.	Air Gap Variation <10%	**good**

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

11.	Lead Length	**9 Inches**	
12.	Lead Numbers	**1-9**	
13.	Frame Condition	**rusty but serviceable**	P93

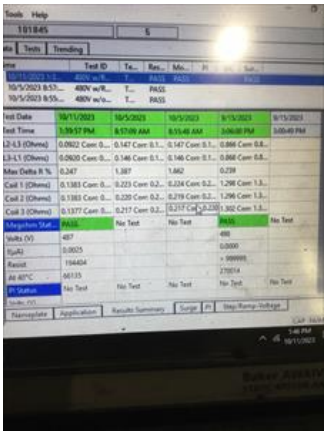
14.	Fan Condition	**(F) Fail**	P95

Cracked

15.	Broken or Missing Components	**fan assy.**

Initial Electrical Inspection

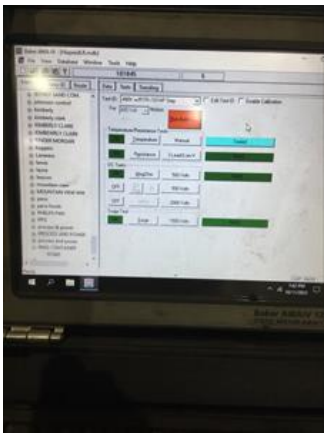
16.	Insulation Resistance/Megger	**Megohms**	P8

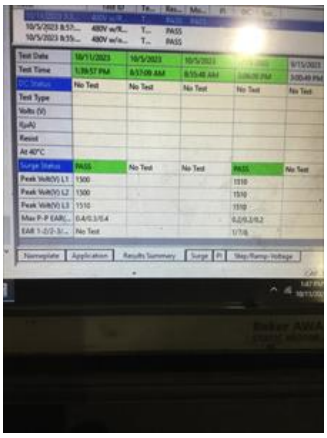


17.	Winding Resistance		

1-2	1-3	2-3

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

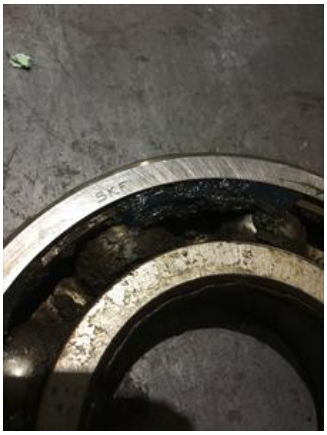




19.	Number of Stator Slots	**60**	
20.	Stator Condition	**pass**	
21.	Stator Thermistors/Ohms	**na**	
22.	Stator Overloads/Ohms	**na**	

Mechanical Inspection

23.	Drive End Bearing Brand	**SKF**	P14



24.	Drive End Bearing Number-	**6313 C3**	P30

25.	Drive End Bearing Qty.	**1**	
26.	Drive End Bearing Type	**(Ball) Ball Bearing**	P49

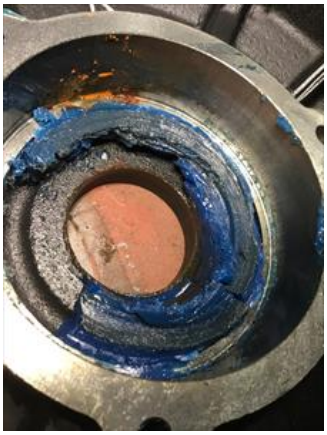
27.	Drive End Lubrication Type	**(Grease) Grease Lubricated**	P60

28.	Drive End Bearing Insulation or Grounding Device?	**none**	
29.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**bearing cap**	P72

30.	Drive End Bearing Condition	**replace**	P77

31.	Opposite Drive End Bearing Brand	**SKF**	
32.	Opposite Drive End Bearing Number-	**6313 C3**	
33.	Opposite Drive End Bearing Qty.	**1**	
34.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**	P92

35.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**	P94



36.	Opposite Drive End Bearing Insulation or Grounding Device?	**none**	
37.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**wavy washer**	P98

38.	Opposite Drive End Bearing Condition	**replace**	
39.	Drive End Seal		P101

40.	Opposite Drive End Seal		P102

Rotor Inspection

41.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**	
42.	Growler Test	**(Pass) Pass**	
43.	Number of Rotor Bars	**47**	
44.	Rotor Condition	**pass**	
45.	List the Parts needed for the Repair Below ***Baldor Fan assembly. Part # 70267***		P46

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

Mechanical Fits- Rotor

47.	Shaft Runout	**0.002 inches**
48.	Rotor Runout	

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

NA

	49.	Coupling Fit Closest to Bearing Housing			
		0 Degrees	90 Degrees	120 Degrees	
		NA			
	50.	Coupling Fit Closest to the end of the Shaft			
		0 Degrees	60 Degrees	120 Degrees	
		NA			
	51.	Drive End Bearing Shaft Fit			
		0 Degrees	60 Degrees	120 Degrees	
		2.5594	**2.5595**	**2.5594**	
●	52.	Drive End Bearing Shaft Fit Condition			**(P) Pass**
	53.	Opposite Drive End Bearing Shaft Fit			P83
		0 Degrees	60 Degrees	120 Degrees	
		2.5596	**2.5597**	**2.5597**	

●	54.	Opposite Drive End Bearing Shaft Fit Condition			**(P) Pass**
	55.	Shaft Air Seal Fits			
		Drive End Air Seal	Opposite Drive End Air Seal		
		NA			

Mechanical Fits- Bearing Housings

	56.	Drive End - Endbell Bearing Fit			
		0 Degrees	60 Degrees	120 Degrees	
		5.5123	**5.5125**	**5.5123**	
●	57.	Drive End - Endbell Bearing Fit Condition			**(P) Pass**
	58.	Opposite Drive End - Endbell Bearing Fit			
		0 Degrees	60 Degrees	120 Degrees	
		5.5118	**5.512**	**5.5119**	
●	59.	Opposite Drive End - Endbell Bearing Fit Condition			**(P) Pass**

60. Bearing Cap Condition

Drive End Bearing Cap	Opposite Drive End Bearing Cap
Good, thick lip	**Good thin lip**

61. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

NA

62. List Machine Work Needed Below

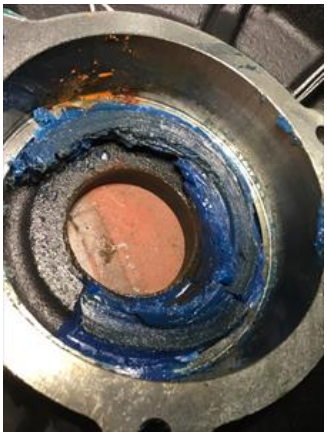
None

63. Technician **Terrence Holland**

Root Cause of Failure

64. Failure locations

Premature bearing failure due to contamination of grease with moisture.



65. Root cause of failure

Moisture contaminated grease.