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

AC Inspection as Found

Hormel (11974)
8201 Fraizer Pike
Little Rock, AR 72206

FolderID: 103163
FormID: 20826178

AC Inspection - Rev. 2

Location:	MOTOR SHOP LR
Serial Number:	B9040686-010L001
Description:	200HP BALDOR EVAL

Hi-Speed Job Number:	103163
Manufacturer:	Baldor
Product Number:	Z44G8505
Serial Number:	B9040686-010L001
HP/kW:	200 (HP)
RPM:	3575 (RPM)
Frame:	447TY
Voltage:	460
Current:	222
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
# of Leads:	6
J-box Included:	None
Coupling/Sheave:	None
Date Received:	06/26/2024
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Rewind:	Yes
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** **10 - Good**

Overall Condition

1.	Report Date	**06/26/2024**

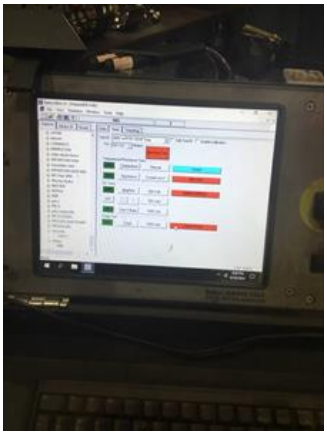
2. Nameplate Picture P37

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

	4.	Describe the Overall Condition of the Equipment as Received ***Serviceable***	
Initial Mechanical/Electrical			
●	5.	Does Shaft Turn Freely?	**(Y) Yes**
●	6.	Does the shaft require T.I.R in Lathe to identify additional repairs?	**(No) No**
	7.	Does Shaft Have Visible Damage?	**(No) No**
●	8.	Assembled Shaft Runout	**0.001 Inches**
	9.	Assembled Shaft End Play	**0 inches**
	10.	Air Gap Variation <10%	
●	11.	Lead Condition	**(P) Pass**
	12.	Lead Length	**17 Inches**
●	13.	Does it have Lugs?, If so what is the Stud Size?	**(Yes) Yes**
	14.	Lead Numbers	**1-3**
	15.	Frame Condition	**pass**
●	16.	Fan Condition	**(P) Pass**
	17.	Broken or Missing Components ***Connection box missing.***	
Initial Electrical Inspection			
	18.	Insulation Resistance/Megger	**Megohms**
	19.	Winding Resistance	

1-2	1-3	2-3

20.	Perform Surge Test	**(F) Fail**	P57



21.	Number of Stator Slots	**48**
22.	Stator Condition	**rewind**
23.	Stator Thermistors/Ohms	**na**
24.	Stator Overloads/Ohms	**na**

Mechanical Inspection

25.	Drive End Bearing Brand	**FAG**
26.	Drive End Bearing Number-	**NU313 E XL M1-C3**
27.	Drive End Bearing Qty.	**1**
28.	Drive End Bearing Type	**(Roller) Roller Bearing**
29.	Drive End Lubrication Type	**(Oil) Oil Lubricated**
30.	Drive End Bearing Insulation or Grounding Device?	**none**
31.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**none**
32.	Drive End Bearing Condition	**replace**
33.	Opposite Drive End Bearing Brand	**FAG**
34.	Opposite Drive End Bearing Number-	**6313 2Z/C3**
35.	Opposite Drive End Bearing Qty.	**1**
36.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**
37.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**
38.	Opposite Drive End Bearing Insulation or Grounding Device?	**none**
39.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**snap ring**
40.	Opposite Drive End Bearing Condition	**replace**
41.	Drive End Seal	**65*85*10** P120

42.	Opposite Drive End Seal		P123

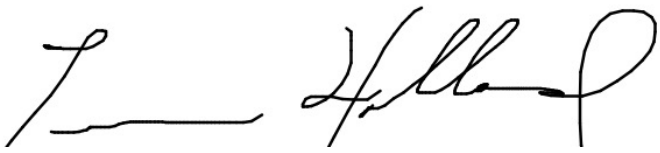
Rotor Inspection

43.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**	
44.	Growler Test	**(Pass) Pass**	P22

45.	Number of Rotor Bars	**38**
46.	Rotor Condition	**pass**
47.	List the Parts needed for the Repair Below	

Fag 6313 2Z/C3--ODE bearing, and dust seal for housing: OD 3.3525--ID 2.5595
Fag NU 313 E XL-M1-C3 DE bearing, and seal for housing 65*85*10

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



Witness:

Mechanical Fits- Rotor

49.	Shaft Runout	**0.001 inches**
50.	Rotor Runout	

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

51.	Coupling Fit Closest to Bearing Housing			
	0 Degrees	90 Degrees	120 Degrees	
52.	Coupling Fit Closest to the end of the Shaft			
	0 Degrees	60 Degrees	120 Degrees	
53.	Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
	2.56	**2.56**	**2.56**	
54.	Drive End Bearing Shaft Fit Condition			**(P) Pass**
55.	Opposite Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
	2.5603	**2.5603**	**2.5604**	
56.	Opposite Drive End Bearing Shaft Fit Condition			**(P) Pass**
57.	Shaft Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		

Mechanical Fits- Bearing Housings

58.	Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	5.5131	**5.5132**	**5.5131**	
59.	Drive End - Endbell Bearing Fit Condition			**(P) Pass**
60.	Opposite Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	5.512	**5.5122**	**5.5121**	
61.	Opposite Drive End - Endbell Bearing Fit Condition			**(P) Pass**

62. Bearing Cap Condition

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

63. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

64. List Machine Work Needed Below

None

65. Technician **Terrence Holland**

Root Cause of Failure

66. Failure locations

Windings on DE show sings of short.

67. Root cause of failure

Unknown. Shows signs of turn to turn short.

Dynamic Balance Report

68. Rotor Weight and Balance Grade

Rotor Weight	Balance Grade

69. Initial Balance Readings

Drive End	Opposite Drive End

70. Final Balance Readings

Drive End	Opposite Drive End

71. Technician

Rewind

72. Core Test Results - Watts loss per Pound

Pre-Burnout	Post Burnout

73. Core Hot Spot Test

Pre-Burnout	Post-Burnout

74. Post Rewind Electrical Test- Insulation Resistance

75. Post Rewind Polarization Index

76. Post Rewind Winding Resistance

1-2	1-3	2-3

77. Post Rewind Surge Test

78. Post Rewind Hi-Pot

79. Technician

Assembly

80. QC Check All Parts for Cleanliness Prior to Assembly

81. Photograph All Major Components prior to assembly

82. Final Insulation Resistance Test

83. Assembled Shaft Endplay

84.	Assembled Shaft Runout		
85.	Test Run Voltage		
	Volts	Volts	Volts
86.	Test Run Amperage		
	Amps	Amps	Amps
87.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
88.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
89.	Ambient Temperature - Fahrenheit		
90.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
91.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
92.	Document Final Condition with Pictures after paint		
93.	Final Pics and QC Review		