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

AC Inspection as Found

Beasly Flooring (12083)
485 HWY 9 SPUR
MELBOURNE, AR 72556

FolderID: 104433
FormID: 24065549

AC Inspection - Rev. 2

Location:	MOTOR SHOP LR
Serial Number:	BB91829
Description:	60 HP WEG

Hi-Speed Job Number:	104433
Manufacturer:	WEG
Product Number:	06018EP3E364T
Serial Number:	BB91829
HP/kW:	60 (HP)
RPM:	1775 (RPM)
Frame:	364/5T
Voltage:	208-230/460
Current:	134/67 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.25
Enclosure:	TEFC
# of Leads:	12
J-box Included:	Complete
Coupling/Sheave:	None
Date Received:	04/15/2025
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
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: **16 - Good**

Overall Condition

1.	Report Date	**04/15/2025**

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***	
●	5.	Is this a UL Listed Motor	**(No) No**
●	6.	Is the motor water cooled or can be pressure checked before teardown	**(No) No**
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%	

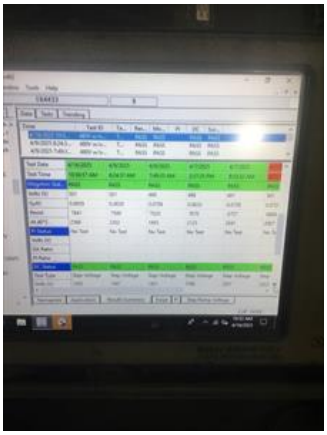
●	13.	Lead Condition	**(P) Pass**	P69

	14.	Lead Length	**8 Inches**	
●	15.	Does it have Lugs?, If so what is the Stud Size?	**(No) No**	
	16.	Lead Numbers	**1-12**	
●	17.	Are the Leads insulated with Chico or other material	**(No) No**	
	18.	Frame Condition	**pass**	
●	19.	Fan Condition	**(P) Pass**	P119

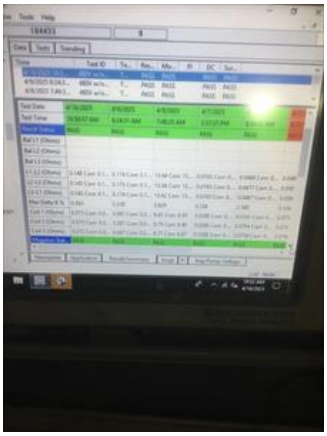
●	20.	Does motor have internal fan?	**(No) No**	
	21.	Broken or Missing Components	**none**	

Initial Electrical Inspection

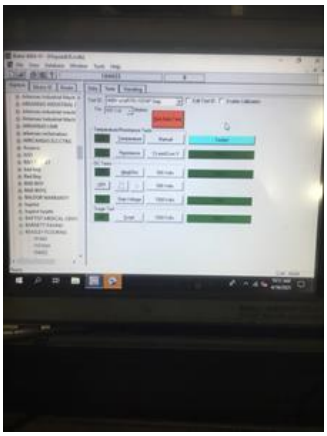
	22.	Insulation Resistance/Megger	**Megohms**	P8

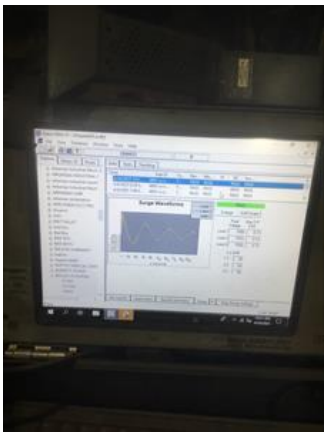


23.	Winding Resistance			P20
	1-2	1-3	2-3	



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





25.	Number of Stator Slots	**72**	
26.	Stator Condition	**pass**	
27.	Stator Thermistors/Ohms	**189.9**	P91

28.	Stator Overloads/Ohms		

Mechanical Inspection

29.	Drive End Bearing Brand	**NSK**	P12

30.	Drive End Bearing Number-	**6314 C3**	
31.	Drive End Bearing Qty.	**1**	
32.	Drive End Bearing Type	**(Ball) Ball Bearing**	
33.	Drive End Lubrication Type	**(Grease) Grease Lubricated**	
34.	Drive End Bearing Insulation or Grounding Device?	**none**	
35.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**snap ring**	
36.	Drive End Bearing Condition	**worn**	
37.	Opposite Drive End Bearing Brand	**NSK**	P94

38.	Opposite Drive End Bearing Number-	**6314 C3**	P1100

39.	Opposite Drive End Bearing Qty.	**1**

40.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**	
41.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**	
42.	Opposite Drive End Bearing Insulation or Grounding Device?	**none**	
43.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**spring loaded cap**	
44.	Opposite Drive End Bearing Condition		P120

45.	Drive End Seal		
46.	Opposite Drive End Seal		

Rotor Inspection

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

48.	Growler Test	**(Pass) Pass**
49.	Number of Rotor Bars	**58**
50.	Rotor Condition	**pass**
51.	List the Parts needed for the Repair Below ***2) 6314 C3 bearings***	
52.	Signature of Technician that Disassembled Motor	**Terrence Holland**

Mechanical Fits- Rotor

53.	Shaft Runout	**0.001 inches**

54. Rotor Runout

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

55. Coupling Fit Closest to Bearing Housing

0 Degrees	90 Degrees	120 Degrees

56. Coupling Fit Closest to the end of the Shaft

0 Degrees	60 Degrees	120 Degrees

57. Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
2.7567	**2.7568**	**2.7569**

58. Drive End Bearing Shaft Fit Condition **(P) Pass**

59. Opposite Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
2.7567	**2.7567**	**2.7568**

60. Opposite Drive End Bearing Shaft Fit Condition **(P) Pass**

61. Shaft Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

Mechanical Fits- Bearing Housings

62. Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
5.9059	**5.906**	**5.9061**

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

64. Opposite Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
5.906	**5.9061**	**5.9063**

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

66. Bearing Cap Condition

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

67. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

68. List Machine Work Needed Below

None

69. Technician **Terrence Holland**

Co sign: RRW

Root Cause of Failure

70. Failure locations

Both bearings

71. Root cause of failure

Electrical fluting in ODE bearing
Sub surface initiated fatigue in DE bearing & contaminated grease.

Dynamic Balance Report

72. Rotor Weight and Balance Grade

Rotor Weight	Balance Grade

73. Initial Balance Readings

Drive End	Opposite Drive End

74. Final Balance Readings

Drive End	Opposite Drive End

75. Technician

Assembly

76. QC Check All Parts for Cleanliness Prior to Assembly
77. Photograph All Major Components prior to assembly
78. Final Insulation Resistance Test
79. Assembled Shaft Endplay
80. Assembled Shaft Runout
81. Test Run Voltage

Volts	Volts	Volts

82. Test Run Amperage

Amps	Amps	Amps

83. Drive End Vibration Readings - Inches Per Second

Horizontal	Vertical	Axial

84. Opposite Drive End Vibration Readings - Inches Per Second

Horizontal	Vertical	Axial

85. Ambient Temperature - Fahrenheit
86. Drive End Bearing Temps - Fahrenheit

5 Minutes	10 Minutes	15 Minutes

87.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
88.	Document Final Condition with Pictures after paint		
89.	Final Pics and QC Review		