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

AC Recondition As Found

Almatis Inc/RCP Bauxite (10014)
4701 Alcoa Road
Bauxite, AR 72011

FolderID: 100793
FormID: 15732551

AC Recondition - Rev. 2

Location:	LR Motor Shop
Serial Number:	M610194

Description:12.5HP IMPERIAL ELECTRIC 1200/360RPM 326T

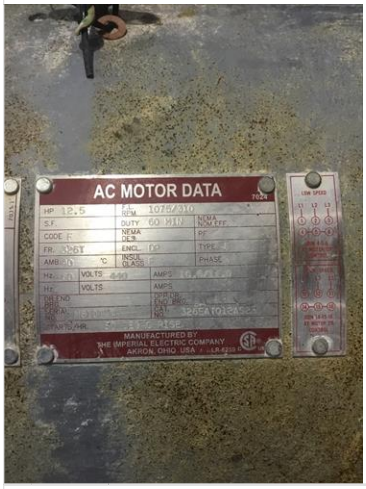
Hi-Speed Job Number:	100793
Manufacturer:	Other
Serial Number:	M610194
HP/kW:	12.5 (HP)
RPM:	1200 (RPM)
Frame:	326T
Voltage:	460
Current:	16.6/11.0
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.00
Enclosure:	ODP
J-box Included:	None
Coupling/Sheave:	None
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **1 - High** **4 - Good**

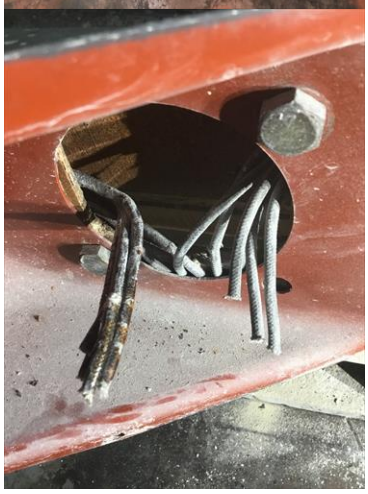
Overall Condition

1. Report Date

2. Nameplate Picture P37



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



4.	Describe the Overall Condition of the Equipment as Received				
Initial Mechanical/Electrical					
5.	Does Shaft Turn Freely?				
6.	Does Shaft Have Visible Damage?				
7.	Assembled Shaft Runout				
8.	Assembled Shaft End Play				
9.	Air Gap Variation <10%				
10.	Lead Condition				
11.	Lead Length				
12.	Frame Condition				
13.	Fan Condition				
14.	Broken or Missing Components				
Initial Electrical Inspection					
15.	Insulation Resistance/Megger			**Megohms**	
16.	Winding Resistance				
	1-2	1-3	2-3		

17.	Perform Surge Test	**(F) Fail**	P55

18.	Number of Stator Slots		
19.	Stator Condition		
Mechanical Inspection			
20.	Drive End Bearing Number-		
21.	Drive End Bearing Qty.		
22.	Drive End Bearing Type		
23.	Drive End Lubrication Type		
24.	Drive End Bearing Insulation or Grounding Device?		
25.	Drive End Wavy Washer/Snap-Ring Other Retention Device?		
26.	Drive End Bearing Condition		
27.	Opposite Drive End Bearing Number-	**6209Z**	P81

28.	Opposite Drive End Bearing Qty.	**1**	
29.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**	
30.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**	
31.	Opposite Drive End Bearing Insulation or Grounding Device?	**none**	
32.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**none**	
33.	Opposite Drive End Bearing Condition	**replace**	
34.	Drive End Seal	**none**	
35.	Opposite Drive End Seal	**none**	
Rotor Inspection			

36. Rotor Type/Material P3

37. Growler Test

38. Number of Rotor Bars

39. Rotor Condition

40. List the Parts needed for the Repair Below

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

Mechanical Fits- Rotor

42. Shaft Runout

43. Rotor Runout

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

44. Coupling Fit Closest to Bearing Housing

0 Degrees	90 Degrees	120 Degrees

45. Coupling Fit Closest to the end of the Shaft

0 Degrees	60 Degrees	120 Degrees

46. Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
2.1657	**2.1657**	**2.1657**

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

48. Opposite Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
1.7718	**1.7717**	**1.7718**

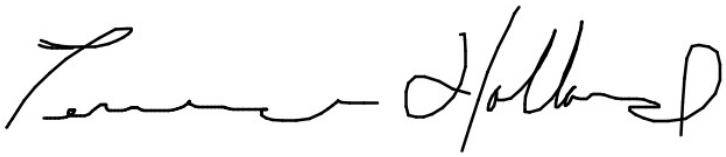
49. Opposite Drive End Bearing Shaft Fit Condition **(P) Pass**

50. Shaft Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

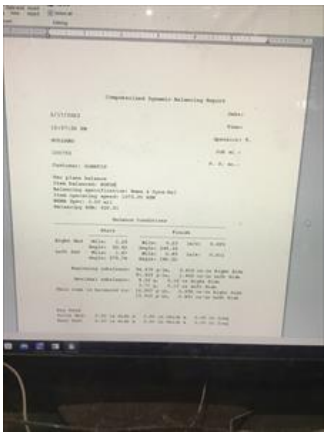
Mechanical Fits- Bearing Housings

51.	Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	4.725	**4.7249**	**4.7251**	
52.	Drive End - Endbell Bearing Fit Condition			**(P) Pass**
53.	Opposite Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	3.3468	**3.3467**	**3.3468**	
54.	Opposite Drive End - Endbell Bearing Fit Condition			**(P) Pass**
55.	Bearing Cap Condition			
	Drive End Bearing Cap	Opposite Drive End Bearing Cap		
56.	End Bell Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		
57.	List Machine Work Needed Below			
58.	Technician			**Terrence Holland**



Dynamic Balance Report

59.	Rotor Weight and Balance Grade		
	Rotor Weight	Balance Grade	
60.	Initial Balance Readings		
	Drive End	Opposite Drive End	
61.	Final Balance Readings		P28
	Drive End	Opposite Drive End	



62. Technician

Rewind

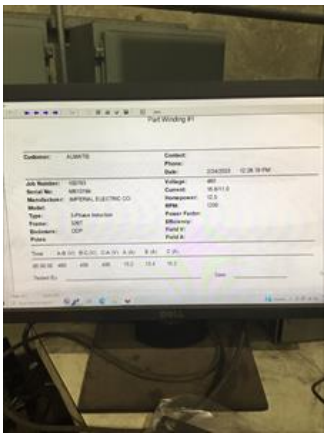
63.	Core Test Results - Watts loss per Pound		
	Pre-Burnout	Post Burnout	
64.	Core Hot Spot Test		
	Pre-Burnout	Post-Burnout	
65.	Post Rewind Electrical Test- Insulation Resistance		
66.	Post Rewind Polarization Index		
67.	Post Rewind Winding Resistance		
	1-2	1-3	2-3
68.	Post Rewind Surge Test		
69.	Post Rewind Hi-Pot		
70.	Technician		
Root Cause of Failure			
71.	Failure locations		
72.	Root cause of failure		
Mechanical Fits- Rotor - Post Repair			
73.	Shaft Runout Post Repair		
74.	Rotor Runout Post Repair		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
75.	Coupling Fit Closest to Bearing Housing Post Repair		
	0 Degrees	90 Degrees	120 Degrees
76.	Coupling Fit Closest to the end of the Shaft Post Repair		
	0 Degrees	60 Degrees	120 Degrees
77.	Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
78.	Opposite Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
79.	Shaft Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
80.	Shaft Repair Sign-off		
Mechanical Fits- Bearing Housings - Post Repair			
81.	Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
82.	Opposite Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees

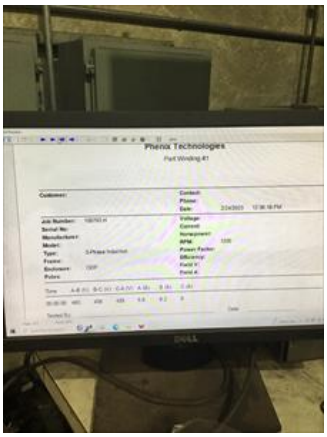
83.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
84.	End Bell Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
85.	End Bell Repair Sign-off		

Assembly

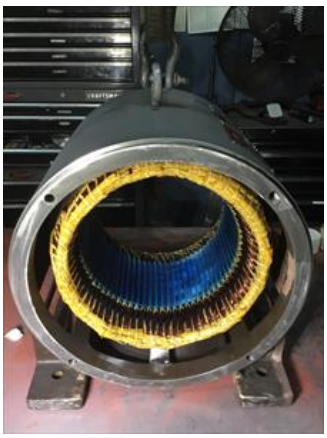
86.	Photograph All Major Components prior to assembly		
87.	Final Insulation Resistance Test		
88.	Assembled Shaft Endplay		
89.	Assembled Shaft Runout		
90.	Test Run Voltage		
	Volts	Volts	Volts
91.	Test Run Amperage		
	Amps	Amps	Amps
92.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
93.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
94.	Ambient Temperature - Fahrenheit		
95.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
96.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes

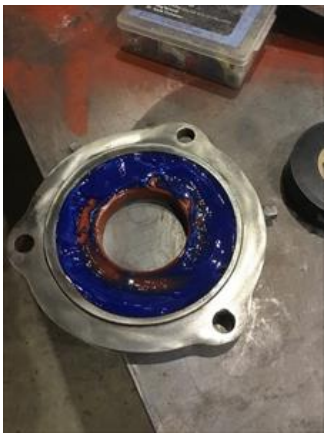
97. Final Test Run Sign-off **Terrence Holland** P97

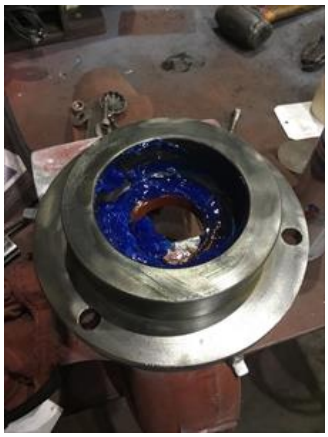




98. Document Final Condition with Pictures after paint P98







99. Final Pics and QC Review **Terrence Holland** P99