

LR Motor Shop Repairs

Job Number 101960

Prepared for Almatis Inc/RCP Bauxite (10014)

4701 Alcoa Road Bauxite AR 72011

Table of Contents

AC Inspection as Found - LR Motor Shop

AC Inspection - Rev. 2: 16-9447-001

1.0



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

> FolderID: 101960 FormID: 18100108

AC Inspection as Found Almatis Inc/RCP Bauxite (10014)

4701 Alcoa Road Bauxite, AR 72011

AC Inspection - Rev. 2

Location: LR Motor Shop Serial Number: 16-9447-001

Description:350HP LOUIS ALLIS 437RPM

7110Z

Product Number: F Serial Number: 1	ouis Allis FR35087110ZZV 6-9447-001 50 (HP)
Serial Number: 1	6-9447-001
LID/LAM.	50 (HP)
HP/kW : 3	
RPM: 4	37 (RPM)
Frame: 7	110Z
Voltage: 4	60
Current: 2	97
Phase: T	'hree
Hz : 6	0 (Hz)
Service Factor: 1	.15
Enclosure: V	VPI
J-box Included: C	Complete
Coupling/Sheave:	lone
Bearing RTDs:	lo
Stator RTDs:	lo
Repair Stage: F	inal
Rewind: Y	'es
Heaters: N	lo
Winding Type : R	Random Wound
Bearing Type:	Rolling Element

Priorities Found: 4 - High

4 - Good

Overall Condition

1. Report Date 10/10/2023

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2. Nameplate Picture





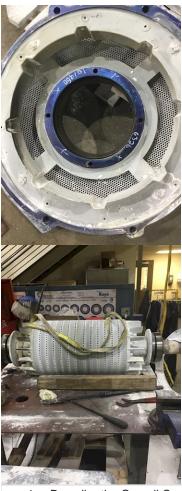
3. Photos of all six sides of the machine.













4. Describe the Overall Condition of the Equipment as Received Dirty. Covered in white powder.

		Dirty. Covered in white powder.			
li	nitial	Mechanical/Electrical			
	5.	Does Shaft Turn Freely?			(Yes) Yes
	6.	Does Shaft Have Visible Damage?			(No) No
	7.	Assembled Shaft Runout		0	0.0003 Inches
	8.	Assembled Shaft End Play			0 inches
	9.	Air Gap Variation <10%			
	10.	Lead Condition			(P) Pass
	11.	Lead Length			18 Inches
	12.	Lead Numbers			1-3
	13.	Frame Condition			god
	14.	Fan Condition			(N) NA
	15.	Broken or Missing Components			none
li	nitial	Electrical Inspection			
	16.	Insulation Resistance/Megger			0 Megohms
	17.	Winding Resistance			
		1-2	1-3	2-3	
		0	0	0	
	-	Shorted			
	18.	Perform Surge Test			(F) Fail
	19.	Number of Stator Slots			72

20. Stator Condition shorted, rewind





21. Stator Thermistors/Ohms 176 Ohms



22.	Stator Overloads/Ohms	no overloads
Mecha	anical Inspection	
23.	Drive End Bearing Brand	skf
24.	Drive End Bearing Number-	6320
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?	none
30.	Drive End Bearing Condition	
31.	Opposite Drive End Bearing Brand	
32.	Opposite Drive End Bearing Number-	6320
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	
39.	Drive End Seal	none
40.	Opposite Drive End Seal	none

Rotor Inspection		
41. Rotor Type/Material	(Copper Barred) Copper Barred Rotor	
42. Growler Test	(Pass) Pass	
43. Number of Rotor Bars	86	
44. Rotor Condition	good	
45. List the Parts needed for the Repair Below		
6320,6320, rewind		
46. Signature of Technician that Disassembled Motor	David Maclin	

1

Mech	Mechanical Fits- Rotor						
47.	Shaft Runout		0.0001 inches				
48.	Rotor Runout						
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing				
	0	0	0				
49.	Coupling Fit Closest to Bearing Housi	ng					
	0 Degrees	90 Degrees	120 Degrees				
	3.8784	3.8784	3.8783				
50.	Coupling Fit Closest to the end of the	Shaft					
	0 Degrees	60 Degrees	120 Degrees				
	3.8751	3.8753	3.8753				
51.	Drive End Bearing Shaft Fit						
	0 Degrees	60 Degrees	120 Degrees				
	3.9377	3.9377	3.9377				
5 2.	Drive End Bearing Shaft Fit Condition		(P) Pass				
53.	Opposite Drive End Bearing Shaft Fit						
	0 Degrees	60 Degrees	120 Degrees				
	3.9377	3.9377	3.9377				
5 4.	Opposite Drive End Bearing Shaft Fit	Condition	(P) Pass				
55.	Shaft Air Seal Fits						
	Drive End Air Seal	Opposite Drive End Air Seal					
	pass	pass					
Mech	Mechanical Fits- Bearing Housings						

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67. Initial Balance Readings

Drive End

Opposite Drive End



68. Final Balance Readings

Drive End

Opposite Drive End



69. Technician Cw

Rewind

70. Core Test Results - Watts loss per Pound

Pre-Burnout

Post Burnout

2.08

1.847





71. Core Hot Spot Test

Pre-Burnout

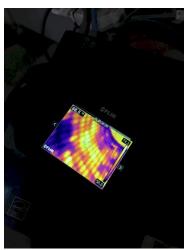
Post-Burnout

50

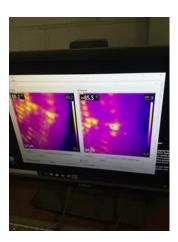
10

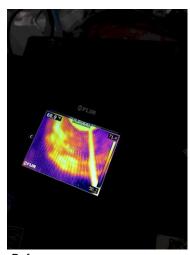


Before

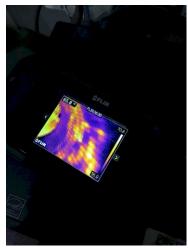


Before





Before



Before

After hottest spot had a 10 degree rise after 2 minutes

72. Post Rewind Electrical Test-Insulation Resistance

23000 Megohms



73. Post Rewind Polarizati	on Index		
74. Post Rewind Winding F	Resistance		
1-2	1-3	2-3	
.0192	.0192	.0193	



75. Post Rewind Surge Test (Pass) Pass



76. Post Rewind Hi-Pot 0.01 micro-amps



77. Technician Brian Goines





83.	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					
Mecha	Mechanical Fits- Bearing Housings - Post Repair					
86.	. Drive End - Endbell Bearing Fit Post Repair					
	0 Degrees	60 Degrees	120 Degrees			
	8.4648	8.4648	8.4648			



87.	87. Opposite Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
	8.465	8.465	8.4651



88. Bearing Cap Condition Post Repair

Drive End Bearing Cap

Opposite Drive End Bearing Cap

Installed Agis ring on D.E. Inner 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

Gary

Assembly

91. QC Check All Parts for Cleanliness Prior to Assembly

Cw

92. Photograph All Major Components prior to assembly



























93.	Final Insulation Resistance Test		Megohms
-	Na		
94.	Assembled Shaft Endplay		inches
-	Na		
95.	Assembled Shaft Runout		inches
-	0.002		
96.	Test Run Voltage		
	Volts	Volts	Volts
	460	459	461



97. Test Run Amperage		
Amps	Amps	Amps
159.3	157.3	158.2



98.	Drive End Vibration Readings - Inches	Per Second		
	Horizontal	Vertical	Axial	
	0.0539	0.0392	0.0525	
99.	Opposite Drive End Vibration Reading	s - Inches Per Second		
	Horizontal	Vertical	Axial	
	0.0411	0.0327	0.0344	
100.	Ambient Temperature - Fahrenheit			
-	Na			
101.	Drive End Bearing Temps - Fahrenhe	t		
	5 Minutes	10 Minutes	15 Minutes	
-	Na			
102.	Opposite Drive End Bearing Temps -	Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes	
-	Na			
103.	Document Final Condition with Picture	es after paint	done	е

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104. Final Pics and QC Review

 Cw

Co sign: TREVOR HALL



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