

Motor Shop Repairs

Job Number 98081

Prepared for Almatis Inc/RCP Bauxite (10014)

4701 Alcoa Road Bauxite AR 72011

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AC Recondition Repair Report

Almatis Inc/RCP Bauxite (10014)

4701 Alcoa Road Bauxite, AR 72011

Priorities Found: 16 - Good

General			
1.	Job Number	98081	
2.	Report Date	4/9/2021	
3.	Customer	ALMATIS	
Name	Plate Information		
4.	Manufacturer	HYUNDAI	













































5.	Model	HLS449SR0608
6.	Serial Number	4W002K09-001
7.	Horsepower	200 HP
8.	KW	KW
9.	Volts	460 Volts
10.	Amps	231.2 Amps
11.	RPM	1185 RPM
12.	Frame	449T
13.	Enclosure	TEFC
14.	Cycles	60 HZ

15. Phase	3			
16. Service Factor	1.15			
17. Motor Mount Position				
Initial Inspection				
18. Number of Leads	6			



19. Lead Length 10 Inches



20. Lead Size

21. Lead Condition (P) Pass



22. Lead Markings 1-6

23. Lug Size, Condition, and Type	
24. Winding RTD's	
25. Winding Rtd's Condition	
OO Ob at Division	0.004
26. Shaft Run Out	0.001
26. Shaft Run Out 27. Does Shaft Turn Freely	yes



29. Bearing Rtd's

30. Bearing Rtd's Condition

31. Contamination

32. Frame Condition(P) Pass





33. Fan Condition
(P) Pass



34.	Broken or missing components	
Initia	l Electric Test	
35.	Resistance to Ground	
36.	Winding Resistance 1-2	
37.	Winding Resistance 2-3	
38.	Winding Resistance 1-3	
39.	Resistive Imbalance	
40.	Hi-Pot	
• 41.	Surge Test	(P) Pass



42. Stator Condition good







43. Failure Location

Initial Rotor Inspection

44. Rotor Type squirrel cage laminate



- 45. Air Gap <10% Variation
- 46. Number of Rotor Bars
- 47. Number of Broken Rotor Bars
- 48. Growler Test

49. Rotor Condition (P) Pass

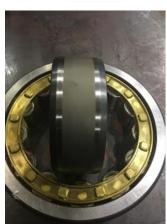


Mechanical Inspection

50. Bearing Manufacture MRC/FAG







51. Bearing DE Size	NU318E. M1.C3. (FAG)
52. Bearing DE Type	NU
53. DE Bearing Qty.	1

54. Bearing ODE Size

MRC 316S-HYB#1. (HYBRID)





55. Bearing ODE Type

MRC 316S-HYB#1 (hybrid)





56.	ODE Bearing Qty.	1
57.	Insulated Bearing	yes (hybrid)
58.	Lubrication Type	grease
59.	Grease Condition	(P) Pass
60.	Bearing Retainers	(Y) Yes





61. Shaft Grounding Device

(Y) Yes

Aegis

62. DE Seal

63. DE Seal Type/Siz	63.	DΕ	Seal	IVDE	2/SIZ6
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- 64. ODE Seal
- 65. ODE Seal Type/Size

Root Cause of Failure

66. Component Failure

- Both bearings.
- Drive end bearing had an excessive amount of electrical fluting. The opposite drive end bearing had true brinelling on the inner and outer races.
- 67. Cause of Failure

Grease from the drive end housing contaminated the aegis ring grounding brushes and reduced their current grounding effectiveness.

68. Comments

Recommend further spacing between the aegis ring and the D.E. bearing cap. Aegis size is 4.0215

Terrence. Holland

La Hella

Mach	ine Fit Inspection Report	
9 70.	Shaft Run Out	(P) Pass
71.	Initial Shaft Run Out	0.001 "
72.	Final Shaft Run Out	
73.	DE Bearing Shaft Fit	
74.	DE Initial Shaft Bearing Fit Size 1	
75.	DE Initial Shaft Bearing Fit Size 2	
76.	DE Initial Shaft Bearing Fit Size 3	
77.	DE Finial Shaft Bearing Fit Size 1	
78.	DE Finial Shaft Bearing Fit Size 2	
79.	DE Finial Shaft Bearing Fit Size 3	
8 0.	ODE Bearing Shaft Fit	(P) Pass
81.	ODE Initial Shaft Bearing Fit Size 1	3.1499 "
82.	ODE Initial Shaft Bearing Fit Size 2	3.15 "
83.	ODE Initial Shaft Bearing Fit Size 3	3.1498 "
84.	ODE Finial Shaft Bearing Fit Size 1	
85.	ODE Finial Shaft Bearing Fit Size 2	
86.	ODE Finial Shaft Bearing Fit Size 3	
87.	DE Air Seal Shaft Fit	
88.	DE Initial Air Seal Shaft Size	
89.	DE Final Air Seal Shaft Size	
90.	ODE Air Seal Shaft Fit	
91.	ODE Initial Air Seal Shaft Size	
92.	ODE Final Air Seal Shaft Size	
93.	DE Endbell Fit	(P) Pass
94.	DE Initial Endbell Fit Size 1	7.4809 "
95.	DE Initial Endbell Fit Size 2	7.4807 "
96.	DE Initial Endbell Fit Size 3	7.4809 "

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98. DE Finial Endbell Fit Size 2	7.4805 "
99. DE Final Endbell Fit Size 3	7.4804 "
100. DE Endbell Fit Insulated	(NA) Not Applicable



101. DE Endbell Air Seal Fit	
102. Initial Endbell Air Seal Fit Size	
103. Finial Endbell Air Seal Fit Size	
● 104. ODE Endbell Fit	(P) Pass
105. ODE Initial Endbell Fit Size 1	6.6932 "
106. ODE Initial Endbell Fit Size 2	6.6931 "
107. ODE Initial Endbell Fit Size 3	6.6933 "
108. ODE Final Endbell Fit Size 1	
109. ODE Final Endbell Fit Size 2	
110. ODE Final Endbell Fit Size 3	
111. ODE Endbell Fit Insulated	
112. ODE Endbell Air Seal Fit	
113. ODE Initial Endbell Seal Fit Size	
114. ODE Finial Endbell Seal Fit Size	
115. Foot Flatness	(P) Pass
● 116. Foot Condition	(P) Pass
■ 117. Flange Condition	(NA) Not Applicable
118. Service Technician	Terrence. Holland

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Balancing Report

119. Balance Type



- 120. Balance Operating Speed
- 121. Start Left End
- 122. Start Right End
- 123. Balancing Specification
- 124. Finish Left End
- 125. Finish Right End
- 126. Service Technician

Assembly and Final Test

- 127. Meggar Testing Reading
- 128. Surge Test
- 129. Hi-Pot
- 130. Winding Resistance 1-2
- 131. Winding Resistance 2-3
- 132. Winding Resistance 1-3
- 133. Test Run Voltage Phase A

Volts



134. Test Run Amps A

135. Test Run Voltage Phase B	
136. Test Run Amps B	
137. Test Run Voltage Phase C	
138. Test Run Amps C	
139. DE Horizontal Vibration Reading	
140. DE Vertical Vibration Reading	
141. DE Axial Vibration Reading	
142. ODE Horizontal Vibration Reading	
143. ODE Vertical Vibration Reading	
144. ODE Axial Vibration Reading	
145. Ambient Temp at start of Test Run	
146. Temp at 5 minutes	
147. Temp at 10 minutes	
148. Temp at 15 minutes	
149. Temp at 20 minutes	
150. Temp at 25 minutes	
151. Temp at 30 minutes	
152. Temp at 35 minutes	
153. Temp at 40 minutes	
154. Temp at 45 minutes	
155. Temp at 50 minutes	
156. Temp at 55 minutes	
157. Temp at 60 minutes	
158. Motor Paint	(P) Pass



159. Service Technician



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