

Motor Shop Repairs

Job Number 99812

Prepared for Riceland Foods (11100-RLF)

Hwy 79 & N. Park Ave. Stuttgart AR 72160

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AC Recondition As Found - Motor Shop

AC Recondition - Rev. 2: QQ2-G17T1862XPE 2

1.0





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

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AC Recondition As Found Riceland Foods (11100-RLF)

Hwy 79 & N. Park Ave. Stuttgart, AR 72160

AC Recondition - Rev. 2

Serial Number: QQ2-G17T1862XPE 2

Description:250HP Siemens 1800RPM B449T

Motor Shop

ΧP

Location:

Hi-Speed Job Number:	99812
Manufacturer:	Siemens
Product Number:	1MB21214EB512AG3
Serial Number:	QQ2-G17T1862XPE 2
HP/kW:	250 (HP)
RPM:	1785 (RPM)
Frame:	B449T
Voltage:	460
Current:	278
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.0
Enclosure:	XP
J-box Included:	Complete
Coupling/Sheave:	None
Date Received:	05/17/2022
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: 8 - Good

Overall Condition

1. Report Date

2. Nameplate Picture















3. Describe the Overall Condition of the Equipment as Received

Initial Mechanical/Electrical

In	Initial Mechanical/Electrical				
	4.	Does Shaft Turn Freely?	(Yes) Yes		
	5.	Does Shaft Have Visible Damage?	(No) No		
	6.	Assembled Shaft Runout			
	7.	Assembled Shaft End Play			
	8.	Air Gap Variation <10%			
	9.	Lead Condition	(P) Pass		



10. Lead Length
11. Frame Condition
12. Fan Condition
13. Fan Condition
14. (P) Pass



13. Broken or Missing Components

Initial Electrical Inspection

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14. Insulation Resistance/Megger





15. Winding Resistance

1-2	1-3	2-3
.0146	.0146	.0146

16. Perform Surge Test(P) Pass



17. Stator Condition wash and bake





Mechanical Inspection

18. Drive End Bearing Number- 6318Z



19. Drive End Bearing Qty.	1
20. Drive End Bearing Type	(Ball) Ball Bearing
21. Drive End Lubrication Type	(Grease) Grease Lubricated
22. Drive End Bearing Insulation or Grounding Device?	no
23. Drive End Wavy Washer/Snap-Ring Other Retention Device?	no

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24. Drive End Bearing Condition

normal wear



25. Opposite Drive End Bearing Number-

6316Z



26. Opposite Drive End Bearing Qty.	1
27. Opposite Drive End Bearing Type	(Ball) Ball Bearing
28. Opposite Drive End Lubrication Type	(Grease) Grease Lubricated
29. Opposite Drive End Bearing Insulation or Grounding Device?	no
30. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	yes
31. Opposite Drive End Bearing Condition	normal wear



- 32. Drive End Seal
- 33. Opposite Drive End Seal

Rotor Inspection

(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast 34. Rotor Type/Material

35. Growler Test (Pass) Pass

36. Number of Rotor Bars

37. Rotor Condition great



38. List the Parts needed for the Repair Below

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B/1	L	:	F:4-	Datas
Mec	nan	IICal	i Fits-	Rotor

40. Shaft Runout

41. Rotor Runout

Drive End Bearing Fit Rotor Body Opposite Drive End Bearing

42. Coupling Fit Closest to Bearing Housing

0 Degrees 90 Degrees 120 Degrees

43. Coupling Fit Closest to the end of the Shaft

0 Degrees 60 Degrees 120 Degrees

44. Drive End Bearing Shaft Fit

0 Degrees 60 Degrees 120 Degrees

3.5442 3.5442 3.5442

45. Drive End Bearing Shaft Fit Condition

(P) Pass



46. Opposite Drive End Bearing Shaft Fit

0 Degrees 60 Degrees 120 Degrees

3.1502 3.1502 3.1502

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



48. Shaft Air Seal Fits

Drive End Air Seal Opposite Drive End Air Seal

Mechanical Fits- Bearing Housings

49. Drive End - Endbell Bearing Fit

0 Degrees 60 Degrees 120 Degrees

7.4815 7.4815 7.4815









51. Opposite Drive End - Endbell Bearing Fit

120 Degrees 0 Degrees 60 Degrees

6.6929 6.6929 6.6929

52. Opposite Drive End - Endbell Bearing Fit Condition

(P) Pass



53. Bearing Cap Condition

Drive End Bearing Cap

Opposite Drive End Bearing Cap

pass



54. End Bell Air Seal Fits

Drive End Air Seal Opposite Drive End Air Seal

55. List Machine Work Needed Below

56. Technician RW





Dynamic Balance Report

57. Rotor Weight and Balance Grad

Balance Grade Rotor Weight

58. Initial Balance Readings

Drive End Opposite Drive End

50	Final Palance Pandings			
59.	Final Balance Readings	One saits Drive Ford		
	Drive End	Opposite Drive End		
60	Technician			
Rewir				
	Core Test Results - Watts loss per Po	und		
01.	Pre-Burnout	Post Burnout		
	r re-Burnout	r ost Bullout		
62.	Core Hot Spot Test			
	Pre-Burnout	Post-Burnout		
63.	Post Rewind Electrical Test- Insulation	n Resistance		
64.	Post Rewind Polarization Index			
65.	Post Rewind Winding Resistance			
	1-2	1-3	2-3	
	Post Rewind Surge Test			
	Post Rewind Hi-Pot			
	Technician			
	Cause of Failure			
	Failure locations			
70.	Root cause of failure			
	None			
	anical Fits- Rotor - Post Repair			
	Shaft Runout Post Repair Rotor Runout Post Repair			
12.	·	Datar Dady	Opposite Drive End Bearing	
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing	
73.	Coupling Fit Closest to Bearing Housi	ng Post Repair		
	0 Degrees	90 Degrees	120 Degrees	
	-			
74.	Coupling Fit Closest to the end of the	Shaft Post Repair		
	0 Degrees	60 Degrees	120 Degrees	
75.	· · · · · · · · · · · · · · · · · · ·			
	0 Degrees	60 Degrees	120 Degrees	
76.	Opposite Drive End Bearing Shaft Fit	Post Renair		
70.	0 Degrees	60 Degrees	120 Degrees	
	0 Degrees	ou Degrees	120 Deglees	
77.	Shaft Air Seal Fits Post Repair			
	Drive End Air Seal	Opposite Drive End Air Seal		
72	Shaft Repair Sign-off			
	Mechanical Fits- Bearing Housings - Post Repair			
Mech		-		
Mech	anical Fits- Bearing Housings - P Drive End - Endbell Bearing Fit Post F	-		
Mech		-	120 Degrees	

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80. Opposite Drive End - Endbell Bearing Fit Post Repair			
	0 Degrees	60 Degrees	120 Degrees
81.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
82	End Bell Air Seal Fits Post Repair		
02.	Drive End Air Seal	Opposite Drive End Air Seal	
	Drive Life All Seal	Opposite Drive Life All Geal	
83.	End Bell Repair Sign-off		
Asser	· •		
	Photograph All Major Components pri	or to assembly	
85.		•	
86.	Assembled Shaft Endplay		
	Assembled Shaft Runout		
88.	Test Run Voltage		
	Volts	Volts	Volts
	459	458	461
0459	0458 0451 1000 1001		
89.	Test Run Amperage		
	Amps	Amps	Amps
	105.6	100.2	100.2
1054	PRODUKT 1996 ON ST. 0460 OSS. 1995 O		
90.	Drive End Vibration Readings - Inches	s Per Second	
	Horizontal	Vertical	Axial
	0.02	0.04	0.02
91.	Opposite Drive End Vibration Reading	gs - Inches Per Second	
	Horizontal	Vertical	Axial
	0.02	0.02	0.01
92.	Ambient Temperature - Fahrenheit		
93.		it	
	5 Minutes	10 Minutes	15 Minutes

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5 Minutes 10 Minutes 15 Minutes

95. Final Test Run Sign-off RW



96. Document Final Condition with Pictures after paint













97. Final Pics and QC Review RW















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- 8. WARRANTIES. Hi-Speed warrants that all goods shall conform in all material aspects to the goods identified in the quotation to Buyer and/or purchase order, and Hi-Speed makes to Buyer the manufacturer's express warranty for any goods sold to Buyer, which is offered by the manufacturer at the time of acceptance of any quotation by Buyer. This warranty is conditioned upon the installation, operation, and maintenance of the goods in accordance with the manufacturer's recommendations and/or standard industry practice and the goods at all times being operated or used under normal operating conditions for which they were designed. Hi-Speed, at its sole option, will repair or

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