

LR Motor Shop Repairs

Job Number 103504

Prepared for Sage V Foods

5901 SLOAN DRIVE LITTLE ROCK AR 72206

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AC Inspection as Found - MOTOR SHOP LR

AC Inspection - Rev. 2: CAT: UJ20P2BM

1.0



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

> FolderID: 103504 FormID: 21599284

AC Inspection as Found

Sage V Foods 5901 SLOAN DRIVE LITTLE ROCK, AR 72206

AC Inspection - Rev. 2

Location: MOTOR SHOP LR Serial Number: CAT: UJ20P2BM

Description: 20HP NIDEC W/ PENTAIR PUMP

Hi-Speed Job Number:	103504
Manufacturer:	US Motors/Nidec
Product Number:	M: G29316
Serial Number:	CAT: UJ20P2BM
HP/kW:	20 (HP)
RPM:	1770 (RPM)
Frame:	256JM
Voltage:	230 / 460
Current:	47.0/23.7 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.25
Enclosure:	TEFC
# of Leads:	9
J-box Included:	Complete
Coupling/Sheave:	None
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: 12 - Good

Overall Condition

1. Report Date 09/16/2024

2. Nameplate Picture



3. Photos of all six sides of the machine.





















Turned impeller true. Gary



Installed upper wear ring. Clearance .03"



Sleeved bowl wear ring. Gary

	•		
4.	Describe the Overall Condition of the Equipment as Received Dirty		
5.	Report Date [COPY]	09/16/2024	
Initial	Mechanical/Electrical		
6 .	Does Shaft Turn Freely?	(Y) Yes	
7 .	Does the shaft require T.I.R in Lathe to identify additional repairs?	(No) No	
8.	Does Shaft Have Visible Damage?	(No) No	
9.	Assembled Shaft Runout	0 Inches	
10.	Assembled Shaft End Play	0 inches	
11.	Air Gap Variation <10%	none	
12.	Lead Condition	(P) Pass	
13.	Lead Length	12 Inches	
1 4.	Does it have Lugs?, If so what is the Stud Size?	(No) No	
15.	Lead Numbers	1-9	
16.	Frame Condition	good	
17.	Fan Condition	(P) Pass	
18.	Broken or Missing Components	none	
Initial Electrical Inspection			
19.	Insulation Resistance/Megger	2000 Megohms	



20.	Winding Resistance			
	1-2	1-3	2-3	
	.393	.393	.393	
21.	Perform Surge Test		(P) P	ass
22.	Number of Stator Slots			36
23.	Stator Condition		go	od
24.	Stator Thermistors/Ohms			na
25.	Stator Overloads/Ohms			na
Mech	anical Inspection			
26.	Drive End Bearing Brand		F	AG





27.	Drive End Bearing Number-	6310
28.	Drive End Bearing Qty.	1
29.	Drive End Bearing Type	(Ball) Ball Bearing
30.	Drive End Lubrication Type	(Grease) Grease Lubricated
31.	Drive End Bearing Insulation or Grounding Device?	none
32.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	snap ring
33.	Drive End Bearing Condition	normal
34.	Opposite Drive End Bearing Brand	FAG
35.	Opposite Drive End Bearing Number-	6207 2RS
36.	Opposite Drive End Bearing Qty.	1
37.	Opposite Drive End Bearing Type	(Ball) Ball Bearing
38.	Opposite Drive End Lubrication Type	(Grease) Grease Lubricated
39.	Opposite Drive End Bearing Insulation or Grounding Device?	none
40.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	wavy
41.	Opposite Drive End Bearing Condition	normal
42.	Drive End Seal	1 1/2 * 2 1/16 carbon ceramic mechanical seal
43.	Opposite Drive End Seal	none
Rotor	Inspection	
44.	Rotor Type/Material	(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast
45.	Growler Test	(Pass) Pass
46.	Number of Rotor Bars	44
47.	Rotor Condition	good

48. List the Parts needed for the Repair Below 6310 2Z, 6207 2RS, 1 1/2 * 2 1/16 carbon ceramic mechanical seal

49. Signature of Technician that Disassembled Motor

David Maclin

Me	echa	anical Fits- Rotor			
		Shaft Runout			0 inches
	51.	Rotor Runout			
		Drive End Bearing Fit	Rotor Body	Opposite Drive End	Bearing
		0	0	0	0
	52.	Coupling Fit Closest to Bearing Housing	ng		
		0 Degrees	90 Degrees	120 Degrees	
		0	0	0	
	53.	Coupling Fit Closest to the end of the	Shaft		
		0 Degrees	60 Degrees	120 Degrees	
		0	0	0	
	54.	Drive End Bearing Shaft Fit			
		0 Degrees	60 Degrees	120 Degrees	
		1.9685	1.9686	1.9686	
	55.	Drive End Bearing Shaft Fit Condition			(P) Pass
	56.	Opposite Drive End Bearing Shaft Fit			
		0 Degrees	60 Degrees	120 Degrees	
		1.3783	1.3783	1.3783	
	57.	Opposite Drive End Bearing Shaft Fit	Condition		(P) Pass
	58.	Shaft Air Seal Fits			
		Drive End Air Seal	Opposite Drive End Air Seal		
		ok	ok		
Me	echa	anical Fits- Bearing Housings			
	59.	Drive End - Endbell Bearing Fit			
		0 Degrees	60 Degrees	120 Degrees	
		4.3313	4.3312	4.3312	
	60.	Drive End - Endbell Bearing Fit Condition	ion		(P) Pass
	61.	Opposite Drive End - Endbell Bearing	Fit		
		0 Degrees	60 Degrees	120 Degrees	
		2.835	2.835	2.835	
	62.	•••	Fit Condition		(P) Pass
	63.	Bearing Cap Condition			
		Drive End Bearing Cap	Opposite Drive End Bearing Ca	ар	
		ok	ok		
	64.				
		Drive End Air Seal	Opposite Drive End Air Seal		
		ok	ok		
	65.				
		Upper wear ring,lower wear ring, machi	ne impeller upper, machine impeller l	ower	





Root Cause of Failure

- 67. Failure locations
- 68. Root cause of failure

Dynamic Balance Report

69. Rotor Weight and Balance Grade

Rotor Weight

Balance Grade

70. Initial Balance Readings

Drive End

Opposite Drive End



71. Final Balance Readings

Drive End

Opposite Drive End



72. Technician

Assembly

To Holling

74. Photograph All Major Components prior to assembly

(Complete) Complete











75. Final Insulation Resistance Test

Megohms

Pass the Hi pot

76. Assembled Shaft Endplay

inches

77.	Assembled Shaft Runout			0 inches
78.	Test Run Voltage			
	Volts	Volts	Volts	
	456	456	457	



Co sign DM

79. Test Run Amperage		
Amps	Amps	Amps
6.3	6.4	6.4



80.	80. Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
81.	Opposite Drive End Vibration Reading	gs - Inches Per Second	
	Horizontal	Vertical	Axial
82.	82. Ambient Temperature - Fahrenheit		
83.	3. Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
84.	34. Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
85.	85. Document Final Condition with Pictures after paint		







86. Final Pics and QC Review RW

■ DM



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