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

AC Inspection as Found

GEORGIA PACIFIC GYPSUM
150 TEMPLE DR
CUMBERLAND, TN 37050

FolderID: 155808
FormID: 24797960

AC Inspection - Rev. 2

Completed by: Brandon Woodard on 06/16/2025

Location: Motor Shop

Serial Number: 200901200

Description:300 HP AC

Hi-Speed Job Number:	155808
Manufacturer:	Toshiba
Product Number:	SD-10033947
Serial Number:	200901200
HP/kW:	300 (HP)
RPM:	1785 (RPM)
Frame:	S449TS
Voltage:	460
Current:	345 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
# of Leads:	6
J-box Included:	None
Coupling/Sheave:	None
Date Received:	06/12/2025
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Rewind:	Yes
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: **4 - High** **11 - Good**

Overall Condition

1.	Report Date	**06/13/2025**

2. Nameplate Picture P2

3. Photos of all six sides of the machine. P3

	4.	Describe the Overall Condition of the Equipment as Received ***Windings grounded. No machine work. Bearings were heavily fluted . Recommend adding aegis ring and insulated bearing.***		
	5.	Is this a UL Listed Motor	**(No) No**	
	6.	Is the motor water cooled or can be pressure checked before teardown	**(No) No**	
Initial Mechanical/Electrical				
	7.	Does Shaft Turn Freely?	**(Y) Yes**	
	8.	Does the shaft require T.I.R in Lathe to identify additional repairs?	**(No) No**	
	9.	Does Shaft Have Visible Damage?	**(No) No**	
	10.	Assembled Shaft Runout	**0.001 Inches**	
	11.	Assembled Shaft End Play	**0.001 inches**	
	12.	Air Gap Variation <10%	**No provisions for measurement**	
	13.	Lead Condition	**(P) Pass**	P13

	14.	Lead Length	**24 Inches**	

15.	Does it have Lugs?, If so what is the Stud Size?	**(Yes) Yes**	P15
	3/8"DAG		

16.	Lead Numbers	**1-6**	
17.	Are the Leads insulated with Chico or other material	**(No) No**	
18.	Frame Condition	**Pass**	
19.	Fan Condition	**(P) Pass**	P19

20.	Does motor have internal fan?	**(No) No**	
21.	Broken or Missing Components	**None**	

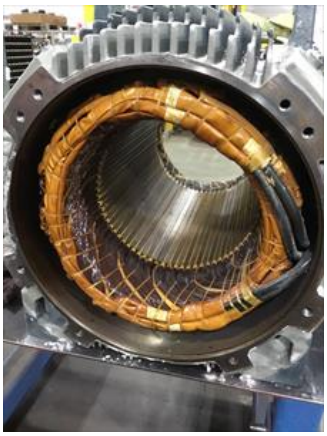
Initial Electrical Inspection

22.	Insulation Resistance/Megger	**0 Megohms**	P22

23.	Winding Resistance			P23
	1-2	1-3	2-3	

24.	Perform Surge Test	**(F) Fail**	P24

25.	Number of Stator Slots	**72**	
26.	Stator Condition	**Requires rewind**	P26



27.	Stator Thermistors/Ohms	**N/A**	
28.	Stator Overloads/Ohms	**N/A**	

Mechanical Inspection

29.	Drive End Bearing Brand		P29

30.	Drive End Bearing Number-	**6318 C3**	
31.	Drive End Bearing Qty.	**1**	
32.	Drive End Bearing Type	**(Ball) Ball Bearing**	
33.	Drive End Lubrication Type	**(Grease) Grease Lubricated**	
34.	Drive End Bearing Insulation or Grounding Device?	**None**	
35.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**Snap Ring**	
36.	Drive End Bearing Condition	**heavy electrical fluting!**	P36

37.	Opposite Drive End Bearing Brand		P37

38.	Opposite Drive End Bearing Number-	**6318 C3**
39.	Opposite Drive End Bearing Qty.	**1**

40.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**	
41.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**	
42.	Opposite Drive End Bearing Insulation or Grounding Device?	**None**	
43.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**Snap Ring**	
44.	Opposite Drive End Bearing Condition	**heavy electrical fluting!**	P44

45.	Drive End Seal	**VA90**	P45

46.	Opposite Drive End Seal	**None**	

Rotor Inspection

47.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**	
48.	Growler Test	**(Pass) Pass**	
49.	Number of Rotor Bars	**58**	
50.	Rotor Condition	**Pass**	
51.	List the Parts needed for the Repair Below ***6318 C3*** ***6318 C3 insulated*** ***Aegis ring SGR-100.1-3FH [Mfr# SGR-100.1-129.5-3FH]*** ***VA90***		
52.	Signature of Technician that Disassembled Motor	**Brandon Woodard**	

Mechanical Fits- Rotor

53.	Shaft Runout		**0.001 inches**

54. Rotor Runout

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
0.002	**0.002**	**0.002**

55. Coupling Fit Closest to Bearing Housing — P55

0 Degrees	90 Degrees	120 Degrees
2.375	**2.375**	**2.375**

56. Coupling Fit Closest to the end of the Shaft

0 Degrees	60 Degrees	120 Degrees
2.375	**2.375**	**2.375**

57. Drive End Bearing Shaft Fit — P57

0 Degrees	60 Degrees	120 Degrees
3.5438	**3.5438**	**3.5438**

Tolerance is 3.5434-3.5440

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

59. Opposite Drive End Bearing Shaft Fit P59

0 Degrees	60 Degrees	120 Degrees
3.5435	**3.5435**	**3.5435**

Tolerance is 3.5434-3.5440

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

61. Shaft Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal
Pass	**Pass**

Mechanical Fits- Bearing Housings

62. Drive End - Endbell Bearing Fit P62

0 Degrees	60 Degrees	120 Degrees
7.4816	**7.4816**	**7.4816**

Tolerance is 7.4803-7.4814. .0002 over tolerance recommend no machine work.

63. Drive End - Endbell Bearing Fit Condition **(P) Pass**

64. Opposite Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
7.4813	**7.4813**	**7.4813**

Tolerance is 7.4803-7.4814

65. Opposite Drive End - Endbell Bearing Fit Condition **(P) Pass** P65

66. Bearing Cap Condition

Drive End Bearing Cap	Opposite Drive End Bearing Cap
Pass	**Pass**

67. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal
Pass	**Pass**

68. List Machine Work Needed Below

None recommend!

69. Technician **Brandon Woodard**

Root Cause of Failure

70. Failure locations

Windings blown

71. Root cause of failure

N/A