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

AC Inspection as Found

KONE INC (10211)
5003 NORTH SHORE LANE
NORTH LITTLE ROCK, AR 72118

FolderID: 101551
FormID: 17176965

AC Inspection - Rev. 2

Location:	Shop
Serial Number:	296308
Description:	6.0 HP

Hi-Speed Job Number:	101551
Manufacturer:	Other
Serial Number:	296308
HP/kW:	6.0 (HP)
RPM:	1800 (RPM)
Voltage:	115/230
Current:	19.6
Phase:	Three
Hz:	60 (Hz)
# of Leads:	3
J-box Included:	None
Date Received:	06/28/2023

Priorities Found: **1 - High** **3 - Good**

Overall Condition

1. Report Date
2. Nameplate Picture P37

3. Photos of all six sides of the machine.

4.	Describe the Overall Condition of the Equipment as Received ***Received Stator and d.e housing only.***	
5.	Distance from the end of the shaft to the Coupling/Sheave	**inches**

Initial Mechanical/Electrical

6.	Does Shaft Turn Freely?	
7.	Does Shaft Have Visible Damage?	
8.	Assembled Shaft Runout	
9.	Assembled Shaft End Play	
10.	Air Gap Variation <10%	
11.	Lead Condition	**(P) Pass**
12.	Lead Length	**6 Inches**
13.	Stator Temperature Detector Rating and Function	

Quantity	Rating	Quantity Passed

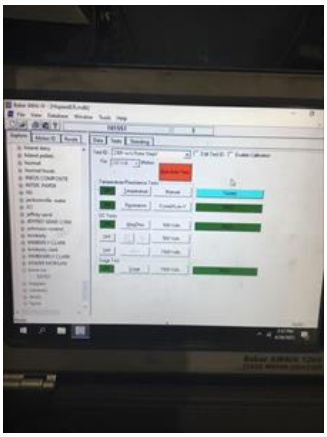
14.	Bearing Temperature Detector Rating and Function	

Quantity	Rating	Quantity Passed

15.	Frame Condition	**pass**
16.	Fan Condition	
17.	Heater Quantity, Ratings	

Quantity	Volts/Watts	Pass/Fail

	18.	Broken or Missing Components			
Initial Electrical Inspection					
	19.	Insulation Resistance/Megger			
	20.	Winding Resistance			
		1-2	1-3	2-3	
	21.	Perform Surge Test		**(P) Pass**	P58



	22.	Number of Stator Slots			
	23.	Stator Condition			
	24.	Stator Thermistors/Ohms			
	25.	Stator Overloads/Ohms			
Mechanical Inspection					
	26.	Drive End Bearing Brand			
	27.	Drive End Bearing Number-			
	28.	Drive End Bearing Qty.			
	29.	Drive End Bearing Type			
	30.	Drive End Lubrication Type			
	31.	Drive End Bearing Insulation or Grounding Device?			
	32.	Drive End Wavy Washer/Snap-Ring Other Retention Device?			
	33.	Drive End Bearing Condition			
	34.	Opposite Drive End Bearing Brand			
	35.	Opposite Drive End Bearing Number-			
	36.	Opposite Drive End Bearing Qty.			
	37.	Opposite Drive End Bearing Type			
	38.	Opposite Drive End Lubrication Type			
	39.	Opposite Drive End Bearing Insulation or Grounding Device?			
	40.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?			
	41.	Opposite Drive End Bearing Condition			
	42.	Drive End Seal			
	43.	Opposite Drive End Seal			
	44.	DE Sleeve Bearing Inside Diameter			
		0 degrees	120 degrees	240 degrees	

45.	DE Sleeve Bearing Outside Diameter		
	0 degrees	120 degrees	240 degrees
46.	DE Sleeve Bearing Housing Inside Diameter		
	0 degrees	120 degrees	240 degrees
47.	DE Sleeve Bearing to Housing Clearance		
	0 degrees	120 degrees	240 degrees
48.	ODE Sleeve Bearing Inside Diameter		
	0 degrees	120 degrees	240 degrees
49.	ODE Sleeve Bearing Outside Diameter		
	0 degrees	120 degrees	240 degrees
50.	ODE Sleeve Bearing Housing Inside Diameter		
	0 degrees	120 degrees	240 degrees
51.	ODE Sleeve Bearing to Housing Clearance		
	0 degrees	120 degrees	240 degrees

Rotor Inspection

52.	Rotor Type/Material
53.	Growler Test
54.	Number of Rotor Bars
55.	Rotor Condition
56.	List the Parts needed for the Repair Below
57.	Signature of Technician that Disassembled Motor

Mechanical Fits- Rotor

58.	Shaft Runout		
59.	Rotor Runout		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
60.	Coupling Fit Closest to Bearing Housing		
	0 Degrees	90 Degrees	120 Degrees
61.	Coupling Fit Closest to the end of the Shaft		
	0 Degrees	60 Degrees	120 Degrees
62.	Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees

63.	Drive End Bearing Shaft Fit Condition
64.	Opposite Drive End Bearing Shaft Fit

	0 Degrees	60 Degrees	120 Degrees

65.	Opposite Drive End Bearing Shaft Fit Condition

66. Shaft Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

Mechanical Fits- Bearing Housings

67. Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees

68. Drive End - Endbell Bearing Fit Condition **(F) Fail**

Lip worn on.

69. Opposite Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees

70. Opposite Drive End - Endbell Bearing Fit Condition **(NA) Not Applicable**

71. Bearing Cap Condition

Drive End Bearing Cap	Opposite Drive End Bearing Cap

72. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

73. List Machine Work Needed Below

Sleeve d.e housing fit.

74. Technician **Terrence Holland**

Dynamic Balance Report

75. Rotor Weight and Balance Grade

Rotor Weight	Balance Grade

76. Initial Balance Readings

Drive End	Opposite Drive End

77. Final Balance Readings

Drive End	Opposite Drive End

78. Technician

Rewind

79. Core Test Results - Watts loss per Pound

Pre-Burnout	Post Burnout

80. Core Hot Spot Test

Pre-Burnout	Post-Burnout

81. Post Rewind Electrical Test- Insulation Resistance

82. Post Rewind Polarization Index

83.	Post Rewind Winding Resistance		
	1-2	1-3	2-3
84.	Post Rewind Surge Test		
85.	Post Rewind Hi-Pot		
86.	Technician		

Root Cause of Failure

87.	Failure locations		
88.	Root cause of failure		

Mechanical Fits- Rotor - Post Repair

89.	Shaft Runout Post Repair		
90.	Rotor Runout Post Repair		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
91.	Coupling Fit Closest to Bearing Housing Post Repair		
	0 Degrees	90 Degrees	120 Degrees
92.	Coupling Fit Closest to the end of the Shaft Post Repair		
	0 Degrees	60 Degrees	120 Degrees
93.	Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
94.	Opposite Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
95.	Shaft Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
96.	Shaft Repair Sign-off		

Mechanical Fits- Bearing Housings - Post Repair

97.	Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
98.	Opposite Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
99.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
100.	End Bell Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
101.	DE Sleeve Bearing Inside ID Post Repair		
	Measure 1	Measure 2	Measure 3

102.	DE Sleeve Bearing Outside ID Post Repair		
	Measure 1	Measure 2	Measure 3
103.	DE Sleeve Bearing Inside OD Post Repair		
	Measure 1	Measure 2	Measure 3
104.	DE Sleeve Bearing Outside OD Post Repair		
	Measure 1	Measure 2	Measure 3
105.	End Bell Repair Sign-off		
106.	ODE Sleeve Bearing Inside ID Post Repair		
	Measure 1	Measure 2	Measure 3
107.	ODE Sleeve Bearing Outside ID Post Repair		
	Measure 1	Measure 2	Measure 3
108.	ODE Sleeve Bearing Inside OD Post Repair		
	Measure 1	Measure 2	Measure 3
109.	ODE Sleeve Bearing Outside OD Post Repair		
	Measure 1	Measure 2	Measure 3

Assembly

110.	QC Check All Parts for Cleanliness Prior to Assembly		
111.	Photograph All Major Components prior to assembly		
112.	Final Insulation Resistance Test		
113.	Assembled Shaft Endplay		
114.	Assembled Shaft Runout		
115.	Test Run Voltage		
	Volts	Volts	Volts
116.	Test Run Amperage		
	Amps	Amps	Amps
117.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
118.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
119.	Ambient Temperature - Fahrenheit		
120.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
121.	Drive End Bearing Temps - Fahrenheit 20-30 Minutes		
	20 Minutes	25 Minutes	30 Minutes

122.	Drive End Bearing Temps - Fahrenheit 35-45 Minutes		
	35 Minutes	40 Minutes	45 Minutes
123.	Drive End Bearing Temps - Fahrenheit 50-60 Minutes		
	50 Minutes	55 Minutes	60 Minutes
124.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
125.	Opposite Drive End Bearing Temps - Fahrenheit 20-30 Minutes		
	20 Minutes	25 Minutes	30 Minutes
126.	Opposite Drive End Bearing Temps - Fahrenheit 35-45 Minutes		
	35 Minutes	40 Minutes	45 Minutes
127.	Opposite Drive End Bearing Temps - Fahrenheit 50-60 Minutes		
	50 Minutes	55 Minutes	60 Minutes
128.	Stator Temperatures- Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
129.	Stator Temperatures- Fahrenheit 20-30 Minutes		
	20 Minutes	25 Minutes	30 Minutes
130.	Stator Temperatures- Fahrenheit 35-45 Minutes		
	35 Minutes	40 Minutes	45 Minutes
131.	Stator Temperatures- Fahrenheit 50-60 Minutes		
	50 Minutes	55 Minutes	60 Minutes
132.	Document Final Condition with Pictures after paint		
133.	Final Pics and QC Review		