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

AC Recondition Repair Report

FolderID: 97845
FormID: 9954132

Community Water System (12207)
299 Lakeshore Drive
Greers Ferry, AR 72067

Priorities Found: **1 - High** **7 - Good**

General

1.	Job Number	**97845**
2.	Report Date	**02/04/2021**
3.	Customer	**Community Water**

Name Plate Information

4.	Manufacturer	**Teco**	P5

5.	Model	
6.	Serial Number	**MN72C7430023**
7.	Horsepower	**50 HP**
8.	KW	**37 KW**
9.	Volts	**230460 Volts**
10.	Amps	**11758.5 Amps**
11.	RPM	**1180 RPM**
12.	Frame	**365T**
13.	Enclosure	**TEFC**
14.	Cycles	**60 HZ**
15.	Phase	**3 PH**

16.	Service Factor	**1.15**	
17.	Motor Mount Position		

Initial Inspection

18.	Number of Leads	**12**	P13

19.	Lead Length	**7 Inches**	
20.	Lead Size		
21.	Lead Condition	**(P) Pass**	
22.	Lead Markings	**T1-T12**	
23.	Lug Size, Condition, and Type		P67

24.	Winding RTD's		
25.	Winding Rtd's Condition		
26.	Shaft Run Out		
27.	Does Shaft Turn Freely	**Yes**	
28.	Does Shaft Have Visible Damage	**no**	
29.	Bearing Rtd's		
30.	Bearing Rtd's Condition		
31.	Contamination		P104

Yes

32.	Frame Condition	**(P) Pass**	P106

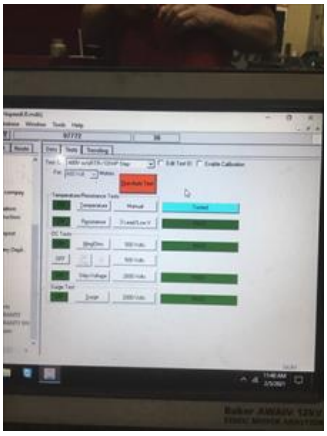
33.	Fan Condition	**(P) Pass**	P109

34.	Broken or missing components

Initial 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** P58



42. Stator Condition **good** P65

43. Failure Location P68

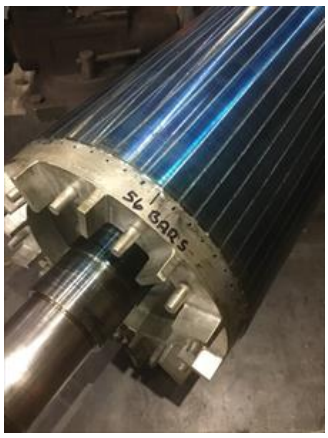
Initial Rotor Inspection

44. Rotor Type **squirrel cage**

45. Air Gap <10% Variation

46.	Number of Rotor Bars	**56**	P24

47.	Number of Broken Rotor Bars	**0**	
48.	Growler Test	**(P) Pass**	
49.	Rotor Condition	**(P) Pass**	P50

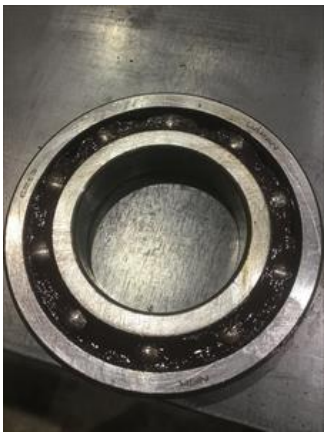


Mechanical Inspection

50.	Bearing Manufacture	**non**	

51.	Bearing DE Size	**6313**	P15

52.	Bearing DE Type	**regular ball bearing**	
53.	DE Bearing Qty.	**1**	
54.	Bearing ODE Size	**6213**	P43



55.	Bearing ODE Type	**regular ball bearing**	
56.	ODE Bearing Qty.	**1**	
57.	Insulated Bearing	**no**	
58.	Lubrication Type	**grease**	
59.	Grease Condition	**(F) Fail**	
60.	Bearing Retainers	**(Y) Yes**	P80

61.	Shaft Grounding Device	**(NA) Not Applicable**

62.	DE Seal	**(NA) Not Applicable**
63.	DE Seal Type/Size	
64.	ODE Seal	**(NA) Not Applicable**
65.	ODE Seal Type/Size	

Root Cause of Failure

66.	Component Failure	**both bearings show extensive signs of fluting** P2

67. Cause of Failure

Fluting in both bearings caused premature bearing failure.

68. Comments

Recommend shaft grounding device to alleviate the fluting in both bearings.

69. Service Technician **Terrence Holland**

Machine Fit Inspection Report

70.	Shaft Run Out
71.	Initial Shaft Run Out
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
80.	ODE Bearing Shaft Fit
81.	ODE Initial Shaft Bearing Fit Size 1
82.	ODE Initial Shaft Bearing Fit Size 2
83.	ODE Initial Shaft Bearing Fit Size 3
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
94.	DE Initial Endbell Fit Size 1
95.	DE Initial Endbell Fit Size 2
96.	DE Initial Endbell Fit Size 3
97.	DE Final Endbell Fit Size 1
98.	DE Finial Endbell Fit Size 2
99.	DE Final Endbell Fit Size 3
100.	DE Endbell Fit Insulated
101.	DE Endbell Air Seal Fit
102.	Initial Endbell Air Seal Fit Size
103.	Finial Endbell Air Seal Fit Size
104.	ODE Endbell Fit
105.	ODE Initial Endbell Fit Size 1
106.	ODE Initial Endbell Fit Size 2
107.	ODE Initial Endbell Fit Size 3
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
116.	Foot Condition
117.	Flange Condition
118.	Service Technician
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

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
159.	Service Technician