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

AC Recondition Repair Report

FolderID: 98067
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FUTURE FUEL CHEMICAL
2800 GAP RD HWY 394 SO
BATESVILLE, AR 72501

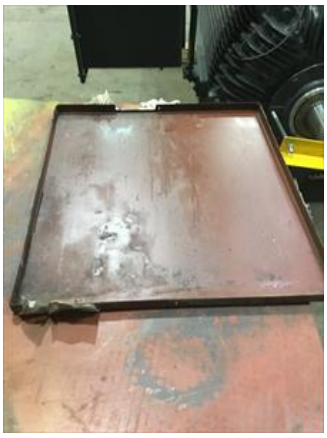
Priorities Found: **17 - Good**

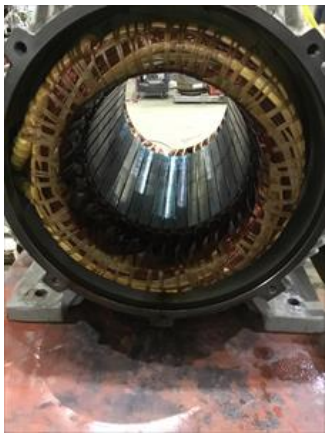
General

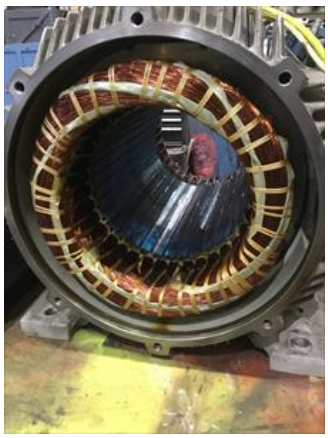
1.	Job Number	**98065**
2.	Report Date	**04/07/2021**
3.	Customer	**FUTURE FUEL**

Name Plate Information

4.	Manufacturer	**SIEMENS**	P5







	5.	Model	**1LE23214DA312AA3**
	6.	Serial Number	**Q2-E19TO329NPI 4**
	7.	Horsepower	**200**
	8.	KW	
	9.	Volts	**460**
	10.	Amps	**216**
	11.	RPM	**3575**
	12.	Frame	**447TS**
	13.	Enclosure	**TEFC**
	14.	Cycles	**60**
	15.	Phase	**3**
	16.	Service Factor	**1.15**
	17.	Motor Mount Position	**horizontal**
Initial Inspection			
	18.	Number of Leads	**3**
	19.	Lead Length	
	20.	Lead Size	
●	21.	Lead Condition	**(P) Pass**
	22.	Lead Markings	**1-3**
	23.	Lug Size, Condition, and Type	
	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 ***Na***	
●	32.	Frame Condition	**(P) Pass**
●	33.	Fan Condition	**(P) Pass**
	34.	Broken or missing components ***Na***	
Initial Electric Test			

	35.	Resistance to Ground	**Mohm**	
	36.	Winding Resistance 1-2	**Ohm**	
	37.	Winding Resistance 2-3	**Ohm's**	
	38.	Winding Resistance 1-3	**Ohm's**	
	39.	Resistive Imbalance	**%**	
	40.	Hi-Pot	**Ua**	
●	41.	Surge Test	**(P) Pass**	
	42.	Stator Condition	**pass**	
	43.	Failure Location		
Initial Rotor Inspection				
	44.	Rotor Type	**cast aluminum**	
	45.	Air Gap <10% Variation		
	46.	Number of Rotor Bars		
	47.	Number of Broken Rotor Bars		
●	48.	Growler Test	**(P) Pass**	
●	49.	Rotor Condition	**(P) Pass**	
Mechanical Inspection				
	50.	Bearing Manufacture	**ORS**	P1

	51.	Bearing DE Size	**6316**	
	52.	Bearing DE Type	**ball**	P23

	53.	DE Bearing Qty.	**1**	
	54.	Bearing ODE Size	**6316**	

	55.	Bearing ODE Type	**ball** P53

	56.	ODE Bearing Qty.	**1**
	57.	Insulated Bearing	
	58.	Lubrication Type	**grease**
●	59.	Grease Condition	**(P) Pass**
●	60.	Bearing Retainers	**(Y) Yes**
	61.	Shaft Grounding Device	
	62.	DE Seal	
	63.	DE Seal Type/Size	
	64.	ODE Seal	
	65.	ODE Seal Type/Size	

Root Cause of Failure

	66.	Component Failure	**bearings show signs of frosting and brinelling**
	67.	Cause of Failure ***Bearings show signs of frosting and brenilling***	
	68.	Comments ***Recommend reconditioning and new bearings***	
	69.	Service Technician	

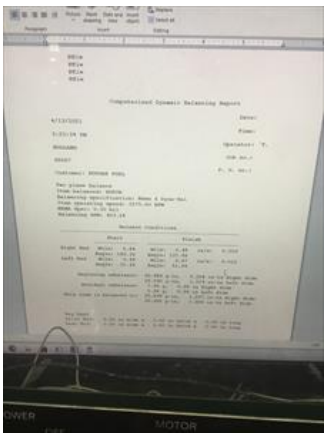
Machine Fit Inspection Report

	70.	Shaft Run Out	
	71.	Initial Shaft Run Out	
	72.	Final Shaft Run Out	
●	73.	DE Bearing Shaft Fit	**(P) Pass**
	74.	DE Initial Shaft Bearing Fit Size 1	**3.1502 "**
	75.	DE Initial Shaft Bearing Fit Size 2	**3.1502 "**
	76.	DE Initial Shaft Bearing Fit Size 3	**3.1502 "**
	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	**(P) Pass**
	81.	ODE Initial Shaft Bearing Fit Size 1	**3.1507 "**
	82.	ODE Initial Shaft Bearing Fit Size 2	**3.1507 "**
	83.	ODE Initial Shaft Bearing Fit Size 3	**3.1507 "**
	84.	ODE Finial Shaft Bearing Fit Size 1	

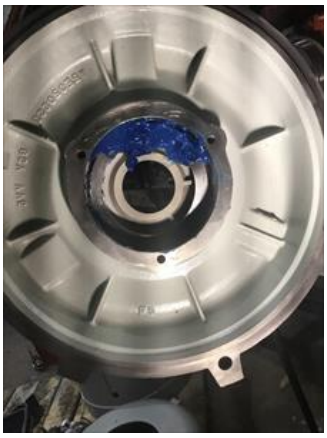
	85.	ODE Finial Shaft Bearing Fit Size 2	
	86.	ODE Finial Shaft Bearing Fit Size 3	
	87.	DE Air Seal Shaft Fit	
	88.	DE Initial Air Seal Shaft Size	
	89.	DE Final Air Seal Shaft Size	
	90.	ODE Air Seal Shaft Fit	
	91.	ODE Initial Air Seal Shaft Size	
	92.	ODE Final Air Seal Shaft Size	
●	93.	DE Endbell Fit	**(P) Pass**
	94.	DE Initial Endbell Fit Size 1	**6.6937 "**
	95.	DE Initial Endbell Fit Size 2	**6.6939 "**
	96.	DE Initial Endbell Fit Size 3	**6.6938 "**
	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	**(P) Pass**
	105.	ODE Initial Endbell Fit Size 1	**6.6938 "**
	106.	ODE Initial Endbell Fit Size 2	**6.6938 "**
	107.	ODE Initial Endbell Fit Size 3	**6.6937 "**
	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	**(P) Pass**
●	116.	Foot Condition	**(P) Pass**
●	117.	Flange Condition	**(NA) Not Applicable**
	118.	Service Technician	

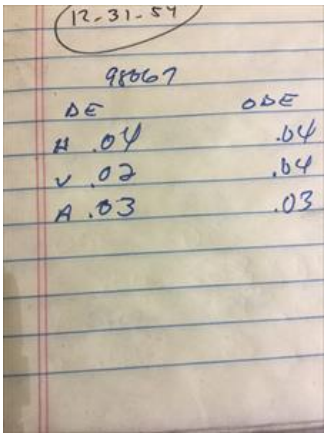
Balancing Report

	119.	Balance Type	**nema standard** P6



120.	Balance Operating Speed		
121.	Start Left End	**0.44 Mills**	
122.	Start Right End	**0.84 Mills**	
123.	Balancing Specification		
124.	Finish Left End	**0.47 Mills**	
125.	Finish Right End		
126.	Service Technician		
Assembly and Final Test			
127.	Meggar Testing Reading	**Mohm**	
128.	Surge Test	**(P) Pass**	
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	**0.04 In/Sec**	
140.	DE Vertical Vibration Reading	**0.02 In/Sec**	
141.	DE Axial Vibration Reading	**0.03 In/Sec**	
142.	ODE Horizontal Vibration Reading	**0.04 In/Sec**	
143.	ODE Vertical Vibration Reading	**0.04 In/Sec**	
144.	ODE Axial Vibration Reading	**0.03 In/Sec**	
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	**(P) Pass**	P136





159. Service Technician **Terrence. Holland**