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

AC Recondition Repair Report

FolderID: 99041
FormID: 12234875

Vulcan Materials
125 Rock Lane
Judsonia, AR 72081

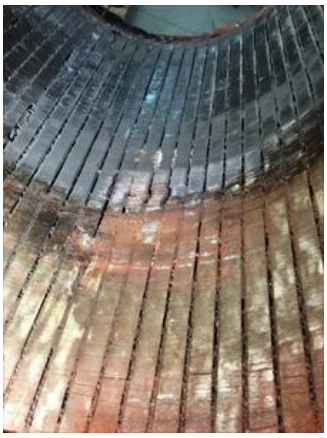
Priorities Found: **3 - High** **9 - Good**

General

1.	Job Number	**99041**
2.	Report Date	**11/30/2021**
3.	Customer	**Vulcan Materials**

Name Plate Information

4.	Manufacturer	**Toshiba**	P5



5.	Model	**B3006ELF4BM**
6.	Serial Number	**94605371**
7.	Horsepower	**300**
8.	KW	
9.	Volts	**460**
10.	Amps	**354**
11.	RPM	**1185**
12.	Frame	**N587UZ**
13.	Enclosure	**TEFC**
14.	Cycles	**60**
15.	Phase	**3**

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

Initial Inspection

18.	Number of Leads	**6**	
	#1-6		
19.	Lead Length	**11 Inches**	
20.	Lead Size		
21.	Lead Condition		P42

22.	Lead Markings	**1-6**	
23.	Lug Size, Condition, and Type		
24.	Winding RTD's		
25.	Winding Rtd's Condition		
26.	Shaft Run Out		
27.	Does Shaft Turn Freely		
28.	Does Shaft Have Visible Damage	**no**	
29.	Bearing Rtd's		
30.	Bearing Rtd's Condition		
31.	Contamination		P104
	Grease contaminated and dirty		

🟢	32.	Frame Condition	**(P) Pass**
🟢	33.	Fan Condition	**(P) Pass**
	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	**(F) Fail**
	42.	Stator Condition	**core repair needed on iron**
	43.	Failure Location	**iron core laminations**
Initial Rotor Inspection			
	44.	Rotor Type	**squirrel cage laminate**
	45.	Air Gap <10% Variation	
	46.	Number of Rotor Bars	
	47.	Number of Broken Rotor Bars	
	48.	Growler Test	
	49.	Rotor Condition	
Mechanical Inspection			
	50.	Bearing Manufacture	**koyo**
	51.	Bearing DE Size	**324R**

52.	Bearing DE Type	**NU**	P23

53.	DE Bearing Qty.	**1**	
54.	Bearing ODE Size	**6320Z/C3**	
55.	Bearing ODE Type	**6320 ZX**	P53

56.	ODE Bearing Qty.	**1**	
57.	Insulated Bearing	**no**	
58.	Lubrication Type	**grease**	
59.	Grease Condition	**(F) Fail**	
60.	Bearing Retainers	**(Y) Yes**	
61.	Shaft Grounding Device		
62.	DE Seal	**(NA) Not Applicable**	
63.	DE Seal Type/Size		
64.	ODE Seal		
65.	ODE Seal Type/Size		

Root Cause of Failure

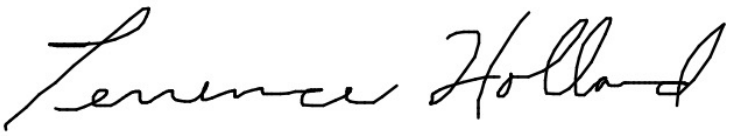
66.	Component Failure	**o.d.e housing fit is grooved and needs machining.**
67.	Cause of Failure	

Windings shorted inside stator housing core.

68.	Comments	

Stator core needs core test.

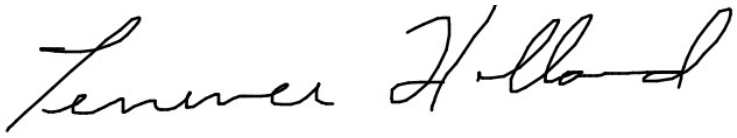
	69.	Service Technician	**Terrence. Holland**



Machine Fit Inspection Report

	70.	Shaft Run Out	
	71.	Initial Shaft Run Out	
	72.	Final Shaft Run Out	
●	73.	DE Bearing Shaft Fit	**(P) Pass**
	74.	DE Initial Shaft Bearing Fit Size 1	**4.7252 "**
	75.	DE Initial Shaft Bearing Fit Size 2	**4.7252 "**
	76.	DE Initial Shaft Bearing Fit Size 3	**4.7251 "**
	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	**3.9373 "**
	82.	ODE Initial Shaft Bearing Fit Size 2	**3.9375 "**
	83.	ODE Initial Shaft Bearing Fit Size 3	**3.9375 "**
	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	**10.2371 "**
	95.	DE Initial Endbell Fit Size 2	**10.237 "**
	96.	DE Initial Endbell Fit Size 3	**10.2371 "**
	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	**(NA) Not Applicable**
	101.	DE Endbell Air Seal Fit	
	102.	Initial Endbell Air Seal Fit Size	
	103.	Finial Endbell Air Seal Fit Size	
●	104.	ODE Endbell Fit	**(F) Fail**
		Excessive wear. Groove worn in.	
	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	**(P) Pass**
116.	Foot Condition	**(P) Pass**
117.	Flange Condition	**(NA) Not Applicable**
118.	Service Technician	**Terrence. Holland**



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