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

AC Recondition As Found

Unimin Corp - Covia(12108)
421 Main St.
Guion, AR 72540

FolderID: 99826
FormID: 13650161

AC Recondition - Rev. 2

Location:	Shop
Serial Number:	S9043405-001 004
Description:	20HP BALDOR 1200RPM 286T

Hi-Speed Job Number:	99826
Manufacturer:	Baldor
Product Number:	CP4102T-4
Spec/ID #:	P28G4673A
Serial Number:	S9043405-001 004
HP/kW:	20 (HP)
RPM:	1175 (RPM)
Frame:	286
Voltage:	460
Current:	26.9
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
J-box Included:	Complete
Coupling/Sheave:	None
Date Received:	05/20/2022
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **2 - High** **2 - Good**

Overall Condition

1. Report Date

2.	Nameplate Picture	P21












3.	Describe the Overall Condition of the Equipment as Received	
Initial Mechanical/Electrical		
4.	Does Shaft Turn Freely?	
5.	Does Shaft Have Visible Damage?	
6.	Assembled Shaft Runout	
7.	Assembled Shaft End Play	
8.	Air Gap Variation <10%	
9.	Lead Condition	P31

10.	Lead Length	**15 Inches**
11.	Frame Condition	

12.	Fan Condition	**(P) Pass**	P52

13.	Broken or Missing Components		

Initial Electrical Inspection

14.	Insulation Resistance/Megger		
15.	Winding Resistance		

1-2	1-3	2-3

16.	Perform Surge Test	**(P) Pass**	P32

17.	Stator Condition	**pass**	P39

Mechanical Inspection

18.	Drive End Bearing Number-	**6310**	P8

19.	Drive End Bearing Qty.	**1**	

20.	Drive End Bearing Type	**(Ball) Ball Bearing**	P20

21.	Drive End Lubrication Type	**(Grease) Grease Lubricated**	P27

22.	Drive End Bearing Insulation or Grounding Device?	**none**	
23.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**none**	
24.	Drive End Bearing Condition	**worn/grease dirty**	P41

25.	Opposite Drive End Bearing Number-	**6310**	
26.	Opposite Drive End Bearing Qty.	**1**	
27.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**	P49

28.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**	
29.	Opposite Drive End Bearing Insulation or Grounding Device?	**none**	
30.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**yes**	P54

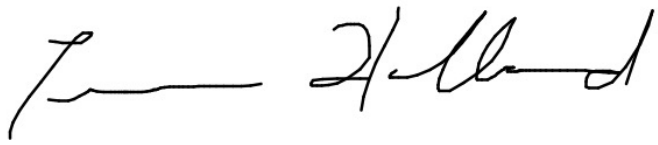
31. Opposite Drive End Bearing Condition

32.	Drive End Seal	
33.	Opposite Drive End Seal	

Rotor Inspection

34.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**	P3

35.	Growler Test	**(Pass) Pass**
36.	Number of Rotor Bars	**61**
37.	Rotor Condition	**good**
38.	List the Parts needed for the Repair Below	
39.	Signature of Technician that Disassembled Motor	**Terrence. Holland**



Mechanical Fits- Rotor

40.	Shaft Runout		
41.	Rotor Runout		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
42.	Coupling Fit Closest to Bearing Housing		
	0 Degrees	90 Degrees	120 Degrees
43.	Coupling Fit Closest to the end of the Shaft		
	0 Degrees	60 Degrees	120 Degrees
44.	Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees
45.	Drive End Bearing Shaft Fit Condition		
46.	Opposite Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees
47.	Opposite Drive End Bearing Shaft Fit Condition		
48.	Shaft Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	

Mechanical Fits- Bearing Housings

49.	Drive End - Endbell Bearing Fit			P2
	0 Degrees	60 Degrees	120 Degrees	

Bad. Lip worn in fit.

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

51.	Opposite Drive End - Endbell Bearing Fit	P19
	0 Degrees	60 Degrees	120 Degrees

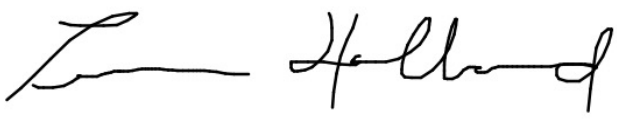
Lip worn in fit.

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

53.	Bearing Cap Condition		P29
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	

54.	End Bell Air Seal Fits	
	Drive End Air Seal	Opposite Drive End Air Seal

55.	List Machine Work Needed Below	
56.	Technician	**Terrence. Holland**



Root Cause of Failure

57.	Failure locations

	Bearings/housing fits
58.	Root cause of failure ***Contaminated grease and both housing fits bad***