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

AC Inspection as Found

Scepter
1485 SCEPTER LN
WAVERLY, TN 37185

FolderID: 154775
FormID: 23441821

AC Inspection - Rev. 2

Location:	Cast House
Serial Number:	

Hi-Speed Job Number:	154775
Manufacturer:	Other
Spec/ID #:	PEWWE200-18-445/7TSC
Serial Number:	ZP 1025857VWIJ
HP/kW:	200 (HP)
RPM:	1790 (RPM)
Frame:	445/7TSC
Voltage:	230 / 460
Current:	458/229 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.25
Enclosure:	TEFC
# of Leads:	12
J-box Included:	Complete
Coupling/Sheave:	None
Date Received:	02/07/2025
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Rewind:	No
Shaft Machined Fit Repairs Required:	No
Bearing Housing Machined Fit Repairs Required:	No
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **3 - High** **46 - Good**

Overall Condition

1.	Report Date	**02/18/2025**

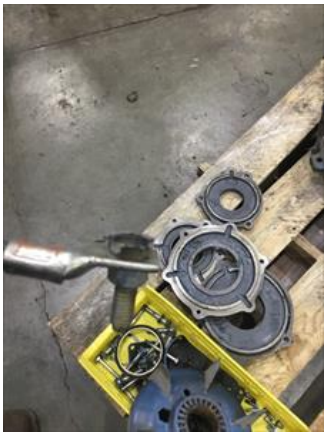
2. Nameplate Picture P2

3. Photos of all six sides of the machine. P3

	4.	Describe the Overall Condition of the Equipment as Received ***Recon with 2 B&B***	

Initial Mechanical/Electrical

🟢	5.	Does Shaft Turn Freely?	**(Y) Yes**	
🟢	6.	Does the shaft require T.I.R in Lathe to identify additional repairs?	**(No) No**	
🟢	7.	Does Shaft Have Visible Damage?	**(No) No**	
🟢	8.	Assembled Shaft Runout	**0.001 Inches**	
🟢	9.	Assembled Shaft End Play	**0.002 inches**	
🟢	10.	Air Gap Variation <10%	**ıo provision for measurement**	
🟢	11.	Lead Condition	**(P) Pass**	
🟢	12.	Lead Length	**18 Inches**	
🟢	13.	Does it have Lugs?, If so what is the Stud Size?	**(No) No**	
🟢	14.	Lead Numbers	**1-12**	
🟢	15.	Frame Condition	**good**	
🟢	16.	Fan Condition	**(P) Pass**	
🟢	17.	Does motor have internal fan?	**(No) No**	
🔴	18.	Broken or Missing Components	**grounding stud**	P18



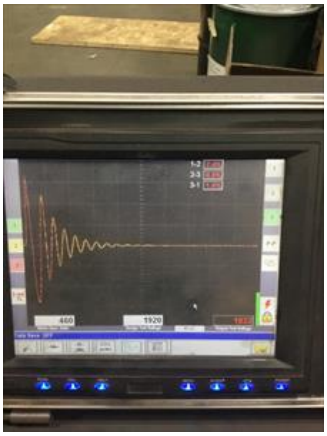
Initial Electrical Inspection

19.	Insulation Resistance/Megger	**23000 Megohms**	P19

20.	Winding Resistance		P20

1-2	1-3	2-3
.019934	**.019824**	**.019894**

21.	Perform Surge Test	**(P) Pass**	P21



22.	Number of Stator Slots	**48**
23.	Stator Condition	**good**
24.	Stator Thermistors/Ohms	**N/A**
25.	Stator Overloads/Ohms	**N/A**

Mechanical Inspection

26.	Drive End Bearing Brand	**FAG**

27.	Drive End Bearing Number-	**6319zz c3**	P27

28.	Drive End Bearing Qty.	**1**
29.	Drive End Bearing Type	**(Ball) Ball Bearing**
30.	Drive End Lubrication Type	**(Grease) Grease Lubricated**
31.	Drive End Bearing Insulation or Grounding Device?	**none present**
32.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**none present**
33.	Drive End Bearing Condition	**normal wear** P33

34.	Opposite Drive End Bearing Brand	**FAG**
35.	Opposite Drive End Bearing Number-	**6313 zz c3** P35

36.	Opposite Drive End Bearing Qty.	**1**
37.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**

38.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**	
39.	Opposite Drive End Bearing Insulation or Grounding Device?	**none present**	
40.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**Snap-ring outboard bearing**	
41.	Opposite Drive End Bearing Condition	**normal wear**	P41

42.	Drive End Seal	**RB 95-115-5.5**	P42

43.	Opposite Drive End Seal	**none present**

Rotor Inspection

44.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**
45.	Growler Test	**(Pass) Pass**
46.	Number of Rotor Bars	**44**
47.	Rotor Condition	**good**
48.	List the Parts needed for the Repair Below	

1- 6313 zz c3 bearing
1- RB 95-115-5.5 slinger with metal housing
1- 6319 zz c3 bearing

49.	Signature of Technician that Disassembled Motor	**Nigel Hill**

Mechanical Fits- Rotor

50.	Shaft Runout

51. Rotor Runout

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

52. Coupling Fit Closest to Bearing Housing

0 Degrees	90 Degrees	120 Degrees
2.375	**2.375**	**2.375**

53. Coupling Fit Closest to the end of the Shaft

0 Degrees	60 Degrees	120 Degrees
2.375	**2.375**	**2.375**

54. Drive End Bearing Shaft Fit P54

0 Degrees	60 Degrees	120 Degrees
3.7405	**3.7405**	**3.7405**

Tolerance is 3.7403-3.7409

55. Drive End Bearing Shaft Fit Condition **(P) Pass**

56. Opposite Drive End Bearing Shaft Fit P56

0 Degrees	60 Degrees	120 Degrees
2.5595	**2.5595**	**2.5595**

Tolerance is 2.5592-2.5597

57. Opposite Drive End Bearing Shaft Fit Condition **(P) Pass**

58. Shaft Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal
Pass	**Pass**

Mechanical Fits- Bearing Housings

59.	Drive End - Endbell Bearing Fit			P59
	0 Degrees	60 Degrees	120 Degrees	
	7.8765	**7.8765**	**7.8765**	
	Tolerance is 7.8740-7.8751			

60.	Drive End - Endbell Bearing Fit Condition		**(F) Fail**
61.	Opposite Drive End - Endbell Bearing Fit		P61
	0 Degrees	60 Degrees	120 Degrees
	5.5138	**5.5137**	**5.514**
	Tolerance is 5.5118-5.5128		

62.	Opposite Drive End - Endbell Bearing Fit Condition		**(F) Fail**
63.	Bearing Cap Condition		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
	Pass	**Pass**	
64.	End Bell Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	
	Pass	**Pass**	
65.	List Machine Work Needed Below		
	Bore and bush both end bells.		
66.	Technician		**Brandon Woodard**

Root Cause of Failure

67.	Failure locations
68.	Root cause of failure