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

AC Inspection as Found

Delta Plastics (11016)
8801 Frazier Pike
Little Rock, AR 72206

FolderID: 103995
FormID: 23049513

AC Inspection - Rev. 2

Location:	MOTOR SHOP LR
Serial Number:	B889014-010002 HQ
Description:	150HP BALDOR 1750RPM

Hi-Speed Job Number:	103995
Manufacturer:	Baldor
Spec/ID #:	B889014
Serial Number:	B889014-010002 HQ
HP/kW:	150 (HP)
RPM:	1750 (RPM)
Frame:	URL2882Z
Voltage:	460
Current:	180 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.00
Enclosure:	DP
# of Leads:	6
J-box Included:	Complete
Coupling/Sheave:	None
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Rewind:	No
Shaft Machined Fit Repairs Required:	Yes
Bearing Housing Machined Fit Repairs Required:	Yes
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **4 - High** **9 - Good**

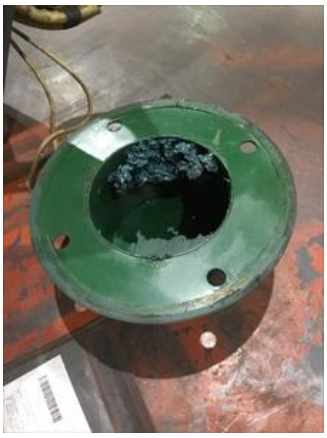
Overall Condition

1.	Report Date	**01/30/2025**

2. Nameplate Picture P37

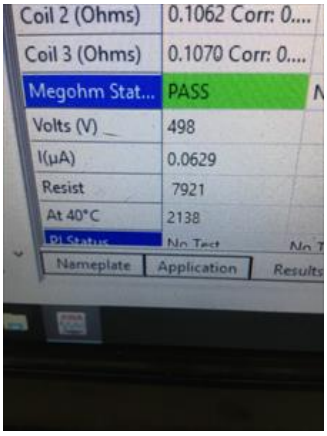
3. Photos of all six sides of the machine. P45

Marked backwards



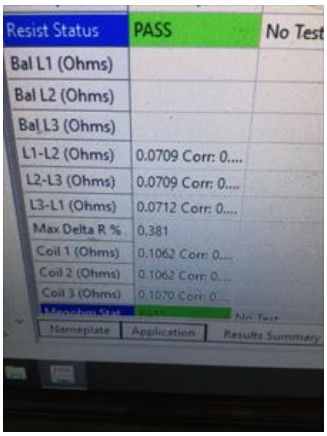
	4.	Describe the Overall Condition of the Equipment as Received ***Dirty***	
Initial Mechanical/Electrical			
🔴	5.	Does Shaft Turn Freely?	**(N) No**
🟢	6.	Does the shaft require T.I.R in Lathe to identify additional repairs?	**(No) No**
	7.	Does Shaft Have Visible Damage?	**(No) No**
	8.	Assembled Shaft Runout	**Inches**
	9.	Assembled Shaft End Play	**inches**
	10.	Air Gap Variation <10%	
🟢	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	**U/T1-V/T2-W/T3**
🟢	15.	Frame Condition	
	16.	Fan Condition	**(N) NA**
	17.	Broken or Missing Components	**J-box cover bolts**
Initial Electrical Inspection			

18.	Insulation Resistance/Megger	**Megohms**	P8



19.	Winding Resistance		P20

1-2	1-3	2-3



20.	Perform Surge Test	**(P) Pass**	P57

21.	Number of Stator Slots	**48**
22.	Stator Condition	**pass**
23.	Stator Thermistors/Ohms	
24.	Stator Overloads/Ohms	**0.3 ohms**

Mechanical Inspection

25.	Drive End Bearing Brand	**FAG**	P12

26.	Drive End Bearing Number-	**NU215**	P32

27.	Drive End Bearing Qty.	**1**
28.	Drive End Bearing Type	**(Roller) Roller Bearing**
29.	Drive End Lubrication Type	**(Grease) Grease Lubricated**
30.	Drive End Bearing Insulation or Grounding Device?	
31.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	
32.	Drive End Bearing Condition	**cage failed**
33.	Opposite Drive End Bearing Brand	**SKF** P92

34.	Opposite Drive End Bearing Number-	**6211**
35.	Opposite Drive End Bearing Qty.	**1**

36.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**
37.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**
38.	Opposite Drive End Bearing Insulation or Grounding Device?	
39.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	
40.	Opposite Drive End Bearing Condition	P118

Primarily contamination and early signs of frosting

41.	Drive End Seal	
42.	Opposite Drive End Seal	

Rotor Inspection

43.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**
44.	Growler Test	**(Pass) Pass**
45.	Number of Rotor Bars	**40**
46.	Rotor Condition	**needs cleaned**
47.	List the Parts needed for the Repair Below	

NU215
6211
Bearing sleeves for both end bell bearing fits

48.	Signature of Technician that Disassembled Motor	**Cw**

Mechanical Fits- Rotor

49.	Shaft Runout	**inches**
50.	Rotor Runout	

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

51.	Coupling Fit Closest to Bearing Housing

0 Degrees	90 Degrees	120 Degrees

52.	Coupling Fit Closest to the end of the Shaft

0 Degrees	60 Degrees	120 Degrees

53. Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees

2.9550-2.9552-2.9548

54. Drive End Bearing Shaft Fit Condition **(F) Fail**

Over sized

55. Opposite Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees

2.1657-2.1658-2.1657

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

57. Shaft Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

Mechanical Fits- Bearing Housings

58. Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees

Excessive lip worn into fit

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

60. Opposite Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees

Signs of excessive wear

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

62. Bearing Cap Condition

Drive End Bearing Cap	Opposite Drive End Bearing Cap

63. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

64. List Machine Work Needed Below

Both end bell bearing fits and DE shaft bearing fit

65. Technician **Cw**

Co sign: TRH

Root Cause of Failure

66. Failure locations

Bearings and bearing fits

67. Root cause of failure

Cage failed on DE bearing

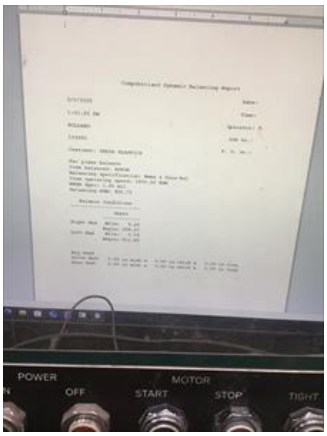
Dynamic Balance Report

68. Rotor Weight and Balance Grade

Rotor Weight	Balance Grade

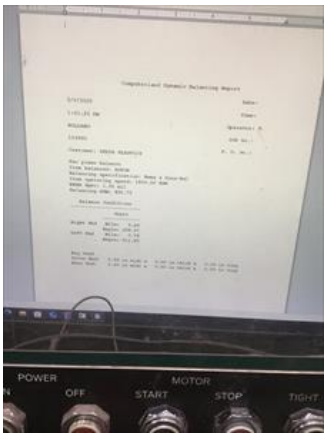
69. Initial Balance Readings P11

Drive End	Opposite Drive End

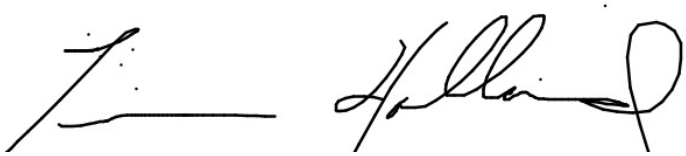


70. Final Balance Readings P27

Drive End	Opposite Drive End



71. Technician **Terrence Holland**



Mechanical Fits- Rotor - Post Repair

72. Shaft Runout Post Repair **inches**

73. Rotor Runout Post Repair

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

74. Coupling Fit Closest to Bearing Housing Post Repair

0 Degrees	90 Degrees	120 Degrees

75. Coupling Fit Closest to the end of the Shaft Post Repair P36

0 Degrees	60 Degrees	120 Degrees
2.9543	**2.9543**	**2.9543**

76. Drive End Bearing Shaft Fit Post Repair

0 Degrees	60 Degrees	120 Degrees

77. Opposite Drive End Bearing Shaft Fit Post Repair

0 Degrees	60 Degrees	120 Degrees

78. Shaft Air Seal Fits Post Repair

Drive End Air Seal	Opposite Drive End Air Seal

79. Shaft Repair Sign-off

Mechanical Fits- Bearing Housings - Post Repair

80. Drive End - Endbell Bearing Fit Post Repair P5

0 Degrees	60 Degrees	120 Degrees
5.1186	**5.1186**	**5.1186**

81. Opposite Drive End - Endbell Bearing Fit Post Repair

0 Degrees	60 Degrees	120 Degrees
3.9377	**3.9378**	**3.9377**

82. Bearing Cap Condition Post Repair

Drive End Bearing Cap	Opposite Drive End Bearing Cap

83. End Bell Air Seal Fits Post Repair

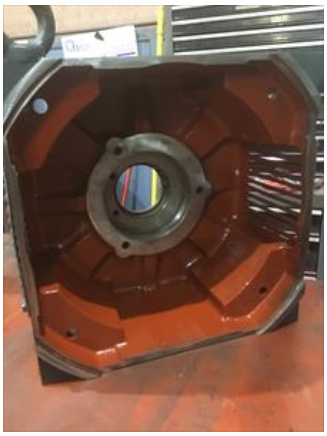
Drive End Air Seal	Opposite Drive End Air Seal

84. End Bell Repair Sign-off **Gary**

Assembly

85. QC Check All Parts for Cleanliness Prior to Assembly **Terrence Holland**

86. Photograph All Major Components prior to assembly P17



87. Final Insulation Resistance Test **Megohms** P31

88.	Assembled Shaft Endplay		**inches**
89.	Assembled Shaft Runout		**0.001 inches**
90.	Test Run Voltage		P56

Volts	Volts	Volts
458	**458**	**459**

91.	Test Run Amperage	P65

Amps	Amps	Amps
48.5	**48.2**	**47.9**

92. Drive End Vibration Readings - Inches Per Second

Horizontal	Vertical	Axial

93. Opposite Drive End Vibration Readings - Inches Per Second

Horizontal	Vertical	Axial

94. Ambient Temperature - Fahrenheit

95. Drive End Bearing Temps - Fahrenheit

5 Minutes	10 Minutes	15 Minutes

96. Opposite Drive End Bearing Temps - Fahrenheit

5 Minutes	10 Minutes	15 Minutes

97. Document Final Condition with Pictures after paint P129

98. Final Pics and QC Review **Terrence. Holland**

Co sign TLH