

EVERY DAY SINCE 1946 —

LR Motor Shop Repairs

Job Number 102896

Prepared for Peco Foods

625 S. Allen Street Batesville AR 72501

Table of Contents

AC Inspection as Found - Shop

AC Inspection - Rev. 2: LSP-S19-6265-3-KT

1.0



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

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AC Inspection as Found

Peco Foods

Location:

625 S. Allen Street Batesville, AR 72501

AC Inspection - Rev. 2

Shop Serial Number: LSP-S19-6265-3-KT

Description: 570HP MARATHON MOTOR

Hi-Speed Job Number:	102896
Manufacturer:	Marathon
Serial Number:	LSP-S19-6265-3-KT
HP/kW:	570 (HP)
RPM:	3530 (RPM)
Frame:	5008DZ
Voltage:	460
Current:	635 (Amps)
Phase:	Three
Hz:	60 (Hz)
Enclosure:	TEFC
# of Leads:	6
J-box Included:	None
Coupling/Sheave:	Coupling
Date Received:	05/06/2024
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:	Yes
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **2 - High**





8 - Good

Overall Condition

1. Report Date 05/13/2024

2. Nameplate Picture



3. Photos of all six sides of the machine.













Describe the Overall Condition of the Equipment as Received
 Dirty

5. Distance from the end of the shaft to the Coupling/Sheave

inches

Inches



Initial Mechanical/Electrical

6. Does Shaft Turn Freely?
(N) No

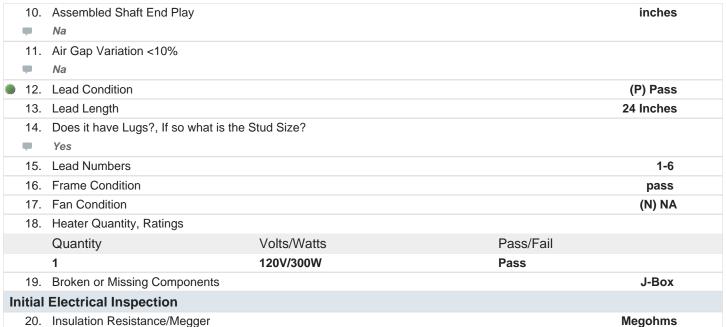
7. Does the shaft require T.I.R in Lathe to identify additional repairs? (Yes) Yes

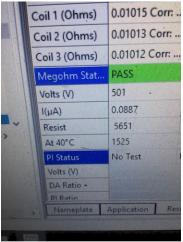
Does Shaft Have Visible Damage? (Yes) Yes



9. Assembled Shaft Runout

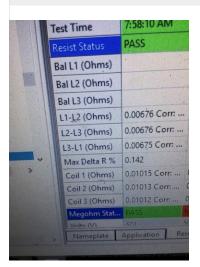
Na





21. Winding Resistance

1-2 1-3 2-3









23.	Number of Stator Slots	48
24.	Stator Condition	needs cleaned
25.	Stator Thermistors/Ohms	
-	Na	
26.	Stator Overloads/Ohms	
-	Na	
Mech	anical Inspection	
27.	Drive End Bearing Brand	Skf
28.	Drive End Bearing Number-	6316



29.	Drive End Bearing Qty.	1
30.	Drive End Bearing Type	(Ball) Ball Bearing
31.	Drive End Lubrication Type	(Grease) Grease Lubricated
32.	Drive End Bearing Insulation or Grounding Device?	na
33.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	na
34.	Drive End Bearing Condition	ball cage failed
35.	Opposite Drive End Bearing Brand	SKF
36.	Opposite Drive End Bearing Number-	6316
37.	Opposite Drive End Bearing Qty.	1
38.	Opposite Drive End Bearing Type	(Ball) Ball Bearing
39.	Opposite Drive End Lubrication Type	(Grease) Grease Lubricated
40.	Opposite Drive End Bearing Insulation or Grounding Device?	na



wavy washer

- 42. Opposite Drive End Bearing Condition
- Signs of metal fatigue and contamination



43.	Drive End Seal	na
44.	Opposite Drive End Seal	na
Rotor	Inspection	
45.	Rotor Type/Material	(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast
46.	Growler Test	(Pass) Pass
47.	Number of Rotor Bars	40
48.	Rotor Condition	needs washed
49.	List the Parts needed for the Repair Below 6316x2	
50.	Signature of Technician that Disassembled Motor	Cw

Mech	Mechanical Fits- Rotor				
51.	Shaft Runout		0.002 inches		
52.	Rotor Runout				
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing		
-	Na				
53.	Coupling Fit Closest to Bearing Housi	ng			
	0 Degrees	90 Degrees	120 Degrees		
-	Na				
54.	Coupling Fit Closest to the end of the	Shaft			
	0 Degrees	60 Degrees	120 Degrees		
-	Na				
55.	Drive End Bearing Shaft Fit				
	0 Degrees	60 Degrees	120 Degrees		
	3.1499	3.1498	3.1499		

_				
	Drive End Bearing Shaft Fit Condition			(P) Pass
57.	Opposite Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
	3.1498	3.1499	3.1499	
58.	Opposite Drive End Bearing Shaft Fit	Condition		(P) Pass
59.	Shaft Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		
7	Na			
	anical Fits- Bearing Housings			
60.	Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	6.6937	6.6937	6.6938	
6 1.				(P) Pass
62.	Opposite Drive End - Endbell Bearing	Fit		
	0 Degrees	60 Degrees	120 Degrees	
	6.6927	6.5929	6.6928	
	Opposite Drive End - Endbell Bearing	Fit Condition		(P) Pass
64.	Bearing Cap Condition			
	Drive End Bearing Cap	Opposite Drive End Bearing Cap		
-	Pass			
65.	End Bell Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		
-	Na			
66.	List Machine Work Needed Below			
	DE of shaft where shaft seats in end be	II		
67.	Technician			Crw
	Muni	/		
-	Co sign: TRH			
Root	Cause of Failure			
68.	Failure locations			
	Bearings			
69.	Root cause of failure			
	Cage failed			
Dyna	mic Balance Report			

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71. Initial Bala	ance Readings		
Drive En	d	Opposite Drive End	
0.17		0.14	
72. Final Bala	ance Readings		
Drive En	d	Opposite Drive End	
0.17		0.14	
73. Technicia	n		RW

Mech	Mechanical Fits- Rotor - Post Repair			
74.	Shaft Runout Post Repair		inches	
75.	Rotor Runout Post Repair			
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing	
76.	Coupling Fit Closest to Bearing Housi	ng Post Repair		
	0 Degrees	90 Degrees	120 Degrees	
77.	Coupling Fit Closest to the end of the	Shaft Post Repair		
	0 Degrees	60 Degrees	120 Degrees	
78.	Drive End Bearing Shaft Fit Post Rep	air		
	0 Degrees	60 Degrees	120 Degrees	
79.	9. Opposite Drive End Bearing Shaft Fit Post Repair			
	0 Degrees	60 Degrees	120 Degrees	

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Turned air seal shoulder to 3.135"

81.	Shaft Repair Sign-off			Gary	
Mech	Mechanical Fits- Bearing Housings - Post Repair				
82.	Drive End - Endbell Bearing Fit Post F	Repair			
	0 Degrees	60 Degrees	120 Degrees		
83.	Opposite Drive End - Endbell Bearing	Fit Post Repair			
	0 Degrees	60 Degrees	120 Degrees		
84.	Bearing Cap Condition Post Repair				
	Drive End Bearing Cap	Opposite Drive End Bearing Cap			
85.	End Bell Air Seal Fits Post Repair				
	Drive End Air Seal	Opposite Drive End Air Seal			



Sleeved air seal fit to 3.160"

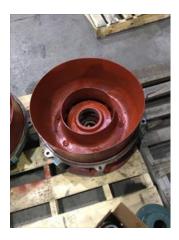
86. End Bell Repair Sign-off

Assembly



88. Photograph All Major Components prior to assembly

(Complete) Complete











89. Final Insulation Resistance Test

7100 Megohms

Passed hi pot

90. Assembled Shaft Endplay

inches







O witness SC Y

93.	Test Run Amperage		
	Amps	Amps	Amps
	191	172	179
-	Delta		





Υ

94.	Drive End Vibration Readings - Inches	Per Second	
	Horizontal	Vertical	Axial
	0.01	0.01	0.01
95.	Opposite Drive End Vibration Reading	s - Inches Per Second	
	Horizontal	Vertical	Axial
	0.03	0.02	0.01
96.	Ambient Temperature - Fahrenheit		
97.	Drive End Bearing Temps - Fahrenhei	t	
	5 Minutes	10 Minutes	15 Minutes

98. Opposite Drive End Bearing Temps - Fahrenheit

5 Minutes 10 Minutes 15 Minutes

99. Document Final Condition with Pictures after paint









100. Final Pics and QC Review

RW

Co witness SC



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- 2. PRICE. All quoted prices shall remain firm and binding for a period of thirty (30) days from the date of quotation or for the period specifically stated in the quotation. The price for any and all goods and/or services ordered or approved by Buyer after thirty (30) days from the date of any quotation are subject to any increase in price that may occur after the expiration of thirty (30) days from the issuance of the quotation and the date the Buyer releases any shipment.
- 3. SCOPE OF GOODS AND/OR SERVICES. The goods and/or services provided by Hi-Speed pursuant to any quotation shall be limited exclusively to those goods and/or services expressly identified therein. Hi-Speed does not assume any responsibility and/or liability for the failure to provide any other goods and/or services not identified in any quotation. Modifications, additions or deletions to or from the scope referenced in any quotation shall only bee effective if evidenced in writing and signed by Hi-Speed. The sale of any of all goods and/or services affected by such modification, addition or deletion shall be subject to these same Standard Terms and Conditions whether or not referenced therein.
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- 5. <u>DELIVERY OF GOODS AND/OR SERVICES.</u> Unless otherwise identified in the quotation, all shipments are F.O.B. Hi-Speed's warehouse and the title to and all risk of loss with respect to any goods shipped shall pass to Buyer when such goods are delivered to the carrier at Hi-Speed's warehouse. Hi-Speed will use its best efforts to affect delivery by the date or dates specified in the quotation. However, Hi-Speed shall not be liable for delay in or failure to make shipment, or to perform services, by any identified date for any reason whatsoever, including but not limited to, causes beyond its reasonable control, such as strikes, fires, floods, epidemics, quarantines, restrictions, severe weather, embargos, acts of God, or public enemy, war, riot, delays in transportation or the inability to obtain necessary labor, materials or manufacturing facilities.
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- 7. INSPECTION/ACCEPTANCE. All goods and services ordered pursuant to any quotation shall be subject to inspection by Buyer after delivery or performance to determine conformity with the quotation and/or purchase order and Hi-Speed's advertised or published specifications. Buyer shall have a period of thirty (30) days from shipment of goods at the delivery destination specified in the quotation within which to inspect the goods for conformity with the quotation, order and/or Hi-Speed's advertised and published specifications and to provide Hi-Speed with written notice of any discrepancy or rejection. Buyer shall have a period of thirty (30) days following completion of any services within which to inspect the services for conformity with the quotation, purchase order and/or Hi-Speed's advertised and published specifications and to provide Hi-Speed with written notice of any discrepancy or rejection. If the goods delivered or services performed do not so conform, upon delivery of notice to Hi-Speed of any discrepancy, nonconformance or rejection, Hi-Speed shall have sixty (60) days to cure the alleged discrepancy and/or nonconformance. If Hi-Speed fails to cure in this time period, Buyer shall have the right to reject such goods or services. After the cure period, goods that have been delivered and rejected, in whole or in part, shall be returned to Hi-Speed. Buyer shall notify Hi-Speed and arrange for the return of the goods as required. Should such non-conforming services be rejected Hi-Speed shall, at its sole cost, re-perform the non-conforming services. Inspection or failure to inspect on any occasion shall not affect Buyer's rights under the warranty provisions herein.
- 8. <u>WARRANTIES.</u> Hi-Speed warrants that all goods shall conform in all material aspects to the goods identified in the quotation to Buyer and/or purchase order, and Hi-Speed makes to Buyer the manufacturer's express warranty for any goods sold to Buyer, which is offered by the manufacturer at the time of acceptance of any quotation by Buyer. This warranty is conditioned upon the installation, operation, and maintenance of the goods in accordance with the manufacturer's recommendations and/or standard industry practice and the goods at all times being operated or used under normal operating conditions for which they were designed. Hi-Speed, at its sole option, will repair or

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- 11. **GOVERNING LAW AND JURISDICTION.** Any controversy arising out of any quotation, the purchase order, the goods sold or delivered, repair or replacement thereof, or any services provided pursuant to any quotation or any purchase order, or these Standard Terms and Conditions shall be governed by the laws of the state of Tennessee without regard to any choice of law provisions and any cause of action related in any manner thereto shall be brought only in the state or federal courts of Shelby County, Tennessee.
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- 13. FORCE MAJEURE. Neither party shall be responsible for any delay or failure in performance of any party of the quotation, purchase order or these Standard Terms and Conditions to the extent that such delays or failures are caused by fire, flood, earth quake, explosion, war, embargo, government requirement, civil or military authority, acts of God, or any other circumstances beyond its reasonable control and not involving any fault or negligence on the party affected ("Condition"). If any such Condition occurs, the party delayed or unable to perform shall promptly give written notice to the other party and, if such Condition remains at the end of thirty (30) days, the party affected by the other party's delay and inability to perform may elect to (i) terminate such order or part thereof, or (ii) suspend the order for the duration of the Condition, if the Buyer is the suspending party, buy elsewhere comparable material to be sold under the order and apply to any commitment the purchase price of such purchase, and resume performance of the order once the Condition ceases, with an option in the affected party to extend the period of this order up to the length of the time the Condition endures.
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- 16. NO INDIVIDUAL LIABILITY. Notwithstanding any other agreement to the contrary, the Buyer agrees that in no event will the Buyer hold and HI-Speed owner, director, officer or employee personally liable for unintentional tortious conduct or conduct that constitutes the breach of any contract between HI-Speed and the Buyer, even if the HI-Speed owner, director, officer or employee is or could be construed to be a party to such contract.