

EVERY DAY SINCE 1946

LR Motor Shop Repairs

Job Number 103909

Prepared for Arauco-Malvern MDF (10298)

1275 Willamette Rd Malvern AR 72104

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

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AC Inspection as Found

Arauco-Malvern MDF (10298) 1275 Willamette Rd Malvern, AR 72104

AC Inspection - Rev. 2

Location:	LR MOTORSHOP
Serial Number:	D05T0141EU 14

Description:75 HP SIEMENS

Hi-Speed Job Number:	103909
Manufacturer:	Siemens
Product Number:	PART: 005T0141EU14
Serial Number:	D05T0141EU 14
HP/kW:	75 (HP)
RPM:	1775 (RPM)
Frame:	365T
Voltage:	230 / 460
Current:	175/87
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
# of Leads:	9
J-box Included:	Half
Coupling/Sheave:	None
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Rewind:	Yes
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: **2 - High**

🔵 10 - Good

Overall Condition

1. Report Date

01/03/2025

2. Nameplate Picture



3. Photos of all six sides of the machine.





4. Describe the Overall Condition of the Equipment as Received Corrosion on shaft and inside junction box.







Ir	nitial	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	0.0005 Inches
	9.	Assembled Shaft End Play	0 inches
	10.	Air Gap Variation <10%	
	11.	Lead Condition	(P) Pass
	12.	Lead Length	14 Inches
	13.	Does it have Lugs?, If so what is the Stud Size?	(Yes) Yes
	•	3/8 stud	
	14.	Lead Numbers	1-9
	15.	Frame Condition	good
	16.	Fan Condition	(P) Pass



17.	Broken or Missing Components		junc	tion box cover	
Initial	Initial Electrical Inspection				
18.	Insulation Resistance/Megger			Megohms	
-	Solid ground				
19.	Winding Resistance				
	1-2	1-3	2-3		
2 0.	Perform Surge Test			(F) Fail	

21.	Number of Stator Slots	48
22.	Stator Condition	shorted
23.	Stator Thermistors/Ohms	none
24.	Stator Overloads/Ohms	none
Mecha	anical Inspection	
25.	Drive End Bearing Brand	
26.	Drive End Bearing Number-	6314
27.	Drive End Bearing Qty.	1
28.	Drive End Bearing Type	(Ball) Ball Bearing
29.	Drive End Lubrication Type	(Grease) Grease Lubricated
30.	Drive End Bearing Insulation or Grounding Device?	aegis



31. Drive End Wavy Washer/Snap-Ring Other Retention Device?

32. Drive End Bearing Condition

aegis ring behind bearing

normal wear



33. Opposite Drive End Bearing Brand	
34. Opposite Drive End Bearing Number-	6210
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?	none present
39. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	wavy washer
40. Opposite Drive End Bearing Condition	normal wear



41.	Drive End Seal		non present	
42.	Opposite Drive End Seal		none present	
Rotor	Inspection			
43.	Rotor Type/Material		(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast	
44.	Growler Test		(Pass) Pass	
45.	Number of Rotor Bars		42	
46.	Rotor Condition		acceptable	
47.	List the Parts needed for the Repair B	elow		
48.	48. Signature of Technician that Disassembled Motor		Shon Jones	
Mech	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 Housi	ng		
	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			
00.	0 Degrees	60 Degrees	120 Degrees	
	2.757	2.7568	2.757	
	Polish to tolerance			
54.	Drive End Bearing Shaft Fit Condition		(P) Pass	
	Polish			
55.	Opposite Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	

1.969

1.969

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1.969

Polish to standard

56.	Opposite Drive End Bearing Shaft Fit Condition Polish		(P) Pass	
57.	Shaft Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		
	good	good		
Mech	Mechanical Fits- Bearing Housings			
58.	Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	5.906	5.9061	5.9057	
	Good			

59. Drive End - Endbell Bearing Fit Condition

(P) Pass



60.	60. Opposite Drive End - Endbell Bearing Fit		
	0 Degrees	60 Degrees	120 Degrees
	2.5437	2.5435	2.5437



61.	. Opposite Drive End - Endbell Bearing Fit Condition		(P) Pass
62.	Bearing Cap Condition		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
	No сар		
—	No cap		
63.	End Bell Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	
	none		

64. List Machine Work Needed Below Polish shaft journals both ends

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65. Technician

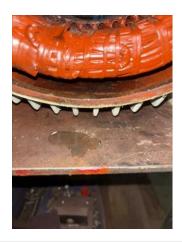
Shon Jones

Root Cause of Failure

66. Failure locations 7 o'clock drive end



67. Root cause of failure Short at edge of slot

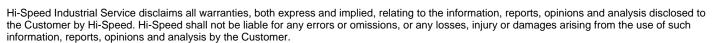


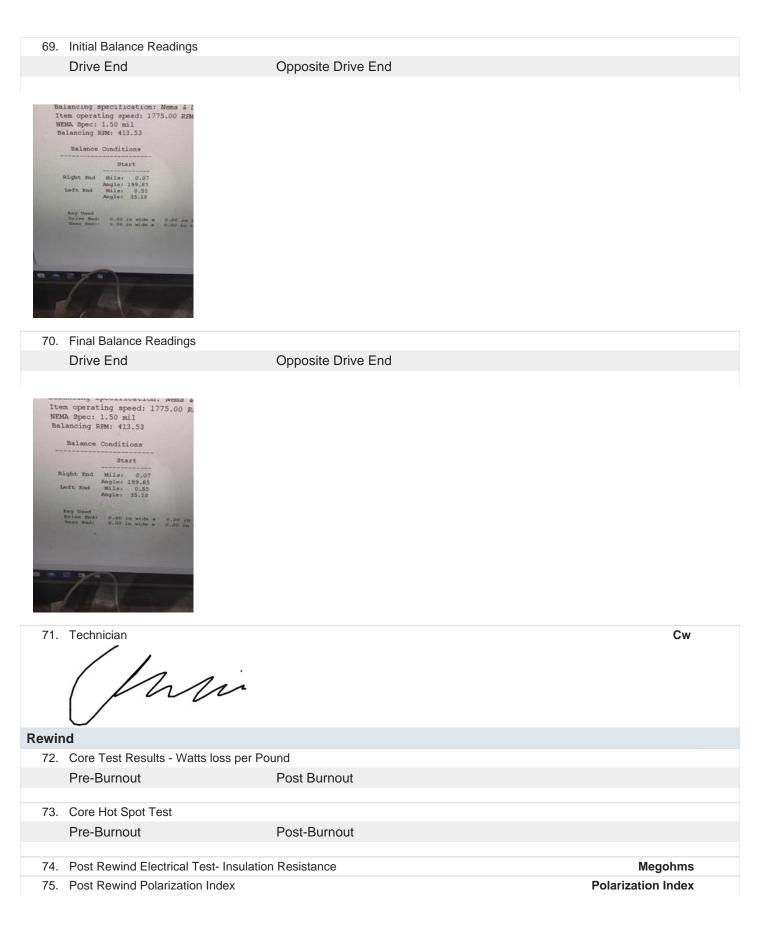
 Dynamic Balance Report

 68.
 Rotor Weight and Balance Grade

 Rotor Weight

Balance Grade





76.	Post Rewind Winding Resistance			
	1-2	1-3	2-3	
77.	Post Rewind Surge Test			
78.	Post Rewind Hi-Pot		micro-	amps
79.	Technician			
Asser	nbly			
80.	QC Check All Parts for Cleanliness P	rior to Assembly		Cw

81. Photograph All Major Components prior to assembly















82.	Final Insulation Resistance Test		Megohms
83.	Assembled Shaft Endplay		inches
84.	Assembled Shaft Runout		inches
85.	Test Run Voltage		
	Volts	Volts	Volts



86. Tes	st Run Amperage		
Am	ips	Amps	Amps



87.	Drive End Vibration Readings - Inches	nd Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial	
88.	Opposite Drive End Vibration Readings - Inches Per Second			
	Horizontal	Vertical	Axial	
89.	Ambient Temperature - Fahrenheit			
90.	Drive End Bearing Temps - Fahrenheit			
	5 Minutes	10 Minutes	15 Minutes	
91.	Opposite Drive End Bearing Temps -	Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes	

92. Document Final Condition with Pictures after paint







93. Final Pics and QC Review

M Co sign RRW

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Cw



AC Random Coil Rewind Report

FolderID: 103909 FormID: 23009701

Arauco-Malvern MDF (10298) 1275 Willamette Rd

Malvern, AR 72104

Priorities Found: **5 - Good**

Gener	al	
1.	Job Number	103909
2.	Report Date	
3.	Customer	Arruco
Stator	Winding	
4.	Core Length	9.125 "
5.	Core ID	9.125 "
6.	Back Iron Depth	0.875 "
7.	Slot Depth	1.125 "
8.	Tooth Width	0.26 "
9.	Number of Vents	
10.	Vent Width	
11.	Before Burnout Core loss	(P) Pass
12.	Flux Before Burnout	
13.	Watts before burnout	
14.	Watts loss per lb. before burnout	1.083 W/lbs.
15.	After Burnout Core Loss	(P) Pass
16.	Flux After burnout	
17.	Watts After Burnout	Watts
18.	Watts loss per lb After Burnout	1.444 W/lbs.
19.	Core Iron Condition	(P) Pass
20.	RTD's	
21.	5	
	Motor Heaters	
	Heater Qty.	
	Heater Voltage	
25.	Heater Wattage	
26.	Thermistors	
27.		4
	Slots	48
-	Number of Coils	
-	12 OF 2	
30.	Coil Weight	
31.	Lead Markings	
	1-2-3-4-5-6-7-8-9	
32.	Grouping	
	12 Of 2	

	Multiple Wires	(Y) Yes
34.	Wire Size	
	5#1.180 1#1.120	
35.	Turns per coil	
	24/24	
36.	Pitch 1 to:	
	10-12	
37.	Connection	
	2&4Delta	
38.	Lead Length	12 "
39.	Lead Size	4
40.	Number of Leads	9
41.	Megger Reading After Rewind	7965 Mohms
42.	Coil Machine Slot	
43.	Coil Machine Tip	
44.	Coil Machine Pitch	
45.	Hi Pot Reading After Rewind	
46.	Surge Pattern After Rewind	(P) Pass
•	3.50n Dr End 3.5 0n 32 Lbs Of # 17 48 Lbs Of # 16 #4 EDPM Lead wire 6Ft	VLL-



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- 1. <u>APPLICABILITY.</u> The sale of any and all goods and/or services by Mock, Inc. d/b/a Hi-Speed Industrial Service ("Hi-Speed") shall be specifically conditioned upon and subject to the following terms and conditions which are incorporated by reference into any contracts and purchase orders with Hi-Speed, and which shall form and become a part of any agreement related thereto. Buyer's acceptance of any offer or quotation made by Hi-Speed for sale of any goods or services is expressly made subject to the terms and conditions set forth herein and to be so effective, Buyer need not sign or approve these Terms and Conditions to be bound hereunder provided a copy of same is provided to Buyer through any means. None of the terms and conditions contained herein may be added to, expanded, changed, modified, superseded or otherwise altered except as revised in writing and duly executed by Hi-Speed, and all orders received by Hi-Speed shall be governed only by the terms and conditions contained herein, notwithstanding any terms, conditions or provisions of any purchase order, release order, authorization or any other form issued by the Buyer. Hi-Speed hereby objects to any additional, modified, changed, deleted, altered or other terms and conditions not contained herein and notifies Buyer that any such terms or provisions are expressly rejected by Hi-Speed.
- 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. <u>SCOPE OF GOODS AND/OR SERVICES.</u> 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 be 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.
- 4. <u>BILLING AND PAYMENT TERMS.</u> Hi-Speed shall invoice Buyer for all goods and/or services as same are rendered at the address listed on the quotation. Payments for all goods and/or services shall be due thirty (30) days from the date of the current invoice or as otherwise set forth in the quotation. Late payments are subject to a late fee of 5% of the total invoice amount. Recurring late payments may lead to a deposit requirement on future services or sale of goods. Buyer shall be liable to Hi-Speed for any and all fees and expenses incurred by Hi-Speed to collect any invoices or to enforce these Standard Terms and Conditions, including but not limited to, attorney's fees.
- 5. DELIVERY OF GOODS AND/OR SERVICES. 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.
- 6. DELIVERY SITE AND TIME FOR PERFORMANCE. Hi-Speed and Buver agree that time is of the essence for the purchase order and that Buyer shall fully cooperate with Hi-Speed in order to allow Hi-Speed full access to prosecute its work diligently and in an orderly manner. Buyer shall assist Hi-Speed in every way possible to avoid delaying, disrupting or interfering with the progress of Hi-Speed's work at the project site. In the event Hi-Speed's work is delayed, hindered, suspended, disrupted, re-sequenced or interfered with or rendered less efficient or more costly or adversely affected in any way as a result of acts or omissions of Buyer or other contractors or employees of Buyer or by any other reason beyond Hi-Speed's control and without the fault of Hi-Speed, then, in such event, Buyer shall be liable to Hi-Speed for any damages, additional costs, expenses, labor, materials, man hours, acceleration costs, overtime, additional jobsite overhead, extended home office overhead, and any and all other direct and indirect expenses of whatsoever nature or kind, caused in whole or in part, as a result of any of the above-referenced occurrences. Hi-Speed's project records will be the basis for computing the additional costs and damages of Hi-Speed's labor, materials, expenses and overhead related to such changes. BUYER WARRANTS THAT THE SITE FOR DELIVERY OR INSTALLATION OF ANY GOODS AND/OR FOR THE PERFORMANCE OF ANY SERVICES SHALL BE READY AND ADEQUATE FOR HI-SPEED'S DELIVERY OF GOODS AND/OR PERFORMANCE OF SERVICES AND THAT HI-SPEED SHALL HAVE FULL ACCESS THERETO, FREE OF ALL OBSTRUCTIONS. BUYER SHALL ASSUME ALL EXTRA COSTS ASSOCIATED WITH HI-SPEED'S INABILITY TO INSTALL ANY GOODS OR PERFORM ANY SERVICES AS A RESULT OF BUYER'S FAILURE TO COMPLY WITH THIS PROVISION. HI-SPEED MAY NOT INSPECT THE SITE PRIOR TO DELIVERY AND/OR INSTALLATION OF GOODS AND/OR PERFORMANCE OF SERVICES AND MAKES NO WARRANTY AS TO THE SUFFICIENCY OF THE SITE FOR THE DELIVERY AND/OR INSTALLATION OF GOODS AND/OR THE PERFORMANCE OF SERVICES AT SUCH SITE.
- 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 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. WARRANTIES. 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

TermsAndConditions

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- 11. <u>GOVERNING LAW AND JURISDICTION.</u> 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.
- 12. <u>ABANDONED EQUIPMENT.</u> Hi-Speed requires that Buyer promptly pick up or provide shipment instructions for Buyer equipment or other Buyer property in Hi-Speed's possession. If equipment or other Buyer property is left with Hi-Speed and not picked up within six (6) months after Hi-Speed's final action related to the applicable property (e.g. evaluation, teardown, estimate, completion of services), Hi-Speed will consider such property abandoned and may dispose of it in accordance with applicable law. Buyer agrees to hold Hi-Speed harmless for any damage or claim for such abandoned property and acknowledges that Hi-Speed may discard or recycle it at Hi-Speed's sole and absolute discretion. Specifically, Hi-Speed may sell Buyer's abandoned property at a private or public sale and retain the proceeds to offset Hi-Speed's storage, inspection and servicing costs. For the avoidance of doubt, Hi-Speed reserves its statutory and other lawful liens for unpaid charges related to abandoned property.
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- 14. <u>NONWAIVER</u>. No course of dealing or failure of either party to strictly enforce any term, right, or condition of these Standard Terms and Conditions will be construed as a waiver of such term, right or condition. Any waiver by Hi-Speed will only be in writing and will waive no succeeding breach of a term, right or condition.
- 15. <u>ASSIGNMENT.</u> The rights and obligations of the parties shall neither be assigned nor delegated without the prior written consent of the other party. However, any party may assign or delegate its respective rights and obligations, in whole or in part, (i) to any subsidiary, (ii) pursuant to other financing, merger or reorganization or (iii) pursuant to any sale or transfer of substantially all of the assets of the assigning party. These Standard Terms and Conditions shall bind the heirs, successors and assigns of the parties hereto.
- 16. <u>NO INDIVIDUAL LIABILITY</u>. 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.