

LR Motor Shop Repairs

Job Number 100596

Prepared for Almatis Inc/RCP Bauxite (10014)

4701 Alcoa Road Bauxite AR 72011

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AC Recondition As Found - LR Motor Shop

AC Recondition - Rev. 2: F-1956

1.0





AC Recondition As Found Almatis Inc/RCP Bauxite (10014)

4701 Alcoa Road Bauxite, AR 72011

FolderID: 100596 FormID: 15248190

AC Recondition - Rev. 2

Location: LR Motor Shop

Serial Number: F-1956

Description: 1.5HP DERRICK SHAKER

3600RPM

| Hi-Speed Job Number: | 100596 |
|----------------------|----------------------|
| Manufacturer: | Other |
| Product Number: | F-5-36-460/480-6-001 |
| Serial Number: | F-1956 |
| HP/kW: | 1.5 (HP) |
| RPM: | 3600 (RPM) |
| Voltage: | 460 |
| Current: | 2.5 |
| Phase: | Three |
| Hz: | 60 (Hz) |
| Service Factor: | 1.10 |
| Enclosure: | TENV |
| J-box Included: | Complete |
| Coupling/Sheave: | None |
| Bearing RTDs: | No |
| Stator RTDs: | No |
| Repair Stage: | Teardown Inspection |
| Heaters: | No |
| Winding Type : | Random Wound |
| Bearing Type: | Rolling Element |
| | |

Priorities Found:

1 - High



6 - Good

Overall Condition

- 1. Report Date
- Nameplate Picture



Photos of all six sides of the machine.

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4. Describe the Overall Condition of the Equipment as Received *Dirty*

Initial Mechanical/Electrical

9. Air Gap Variation <10%

| (| 5. | Does Shaft Turn Freely? | (Yes) Yes | |
|---|----|---------------------------------|-----------|--|
| | 6. | Does Shaft Have Visible Damage? | (No) No | |
| | 7. | Assembled Shaft Runout | | |
| | 8 | Assembled Shaft End Play | | |

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| 1 0. | Lead Condition | | (F) Fail |
|-------------|---|-------------------------|----------------------------|
| | Soft and tear's easy | | |
| 11. | | | 62 Inches |
| | Frame Condition | | pass |
| 13. | Fan Condition | | (N) NA |
| 14. | Broken or Missing Components | | na |
| | Electrical Inspection | | |
| | Insulation Resistance/Megger | | Megohms |
| | Winding Resistance | | - |
| | 1-2 | 1-3 | 2-3 |
| | | | |
| 17 . | Perform Surge Test | | (P) Pass |
| 18. | Number of Stator Slots | | |
| 19. | Stator Condition | | |
| Mecha | anical Inspection | | |
| 20. | Drive End Bearing Number- | | 6315-C3 |
| 21. | Drive End Bearing Qty. | | 1 |
| 22. | Drive End Bearing Type | | (Ball) Ball Bearing |
| 23. | Drive End Lubrication Type | | (Grease) Grease Lubricated |
| 24. | Drive End Bearing Insulation or Grounding Device? | | na |
| | | | |
| 25. | Drive End Wavy Washer/Snap-Ring | Other Retention Device? | na |



| 27. Opposite Drive End Bearing Number- | 6315C3 |
|--|----------------------------|
| 28. Opposite Drive End Bearing Qty. | 1 |
| 29. Opposite Drive End Bearing Type | (Ball) Ball Bearing |
| 30. Opposite Drive End Lubrication Type | (Grease) Grease Lubricated |
| 31. Opposite Drive End Bearing Insulation or Grounding Device? | na |
| 32. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device? | na |



| 34. | Drive End Seal | na |
|-------|---|--|
| 35. | Opposite Drive End Seal | na |
| Rotor | Inspection | |
| 36. | Rotor Type/Material | (Copper Barred) Copper Barred Rotor |
| 37. | Growler Test | (Pass) Pass |
| 38. | Number of Rotor Bars | |
| 39. | Rotor Condition | pass |
| 40. | List the Parts needed for the Repair Below | |
| | 6315x2 Lead cord | |
| 41. | Signature of Technician that Disassembled Motor | Cw |

Man

| Mechanical Fits- Rotor | | | |
|------------------------|--|------------|----------------------------|
| 42. | Shaft Runout | | |
| 43. | Rotor Runout | | |
| | Drive End Bearing Fit | Rotor Body | Opposite Drive End Bearing |
| | | | |
| 44. | Coupling Fit Closest to Bearing Housi | ng | |
| | 0 Degrees | 90 Degrees | 120 Degrees |
| | | | |
| 45. | Coupling Fit Closest to the end of the Shaft | | |
| | 0 Degrees | 60 Degrees | 120 Degrees |
| | | | |
| 46. | Drive End Bearing Shaft Fit | | |
| | 0 Degrees | 60 Degrees | 120 Degrees |
| | | | |
| • 47. | Drive End Bearing Shaft Fit Condition | | (P) Pass |
| 48. | Opposite Drive End Bearing Shaft Fit | | |
| | 0 Degrees | 60 Degrees | 120 Degrees |
| | | | |
| 4 9. | Opposite Drive End Bearing Shaft Fit | Condition | (P) Pass |

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| | 50. | Shaft Air Seal Fits | | | |
|-----------------------------------|----------|---|--------------------------------|-------------|----------|
| | | Drive End Air Seal | Opposite Drive End Air Seal | | |
| | | | | | |
| Mechanical Fits- Bearing Housings | | | | | |
| | 51. | Drive End - Endbell Bearing Fit | | | |
| | | 0 Degrees | 60 Degrees | 120 Degrees | |
| | 52. | Drive End - Endbell Bearing Fit Condition | tion | | (P) Pass |
| | 53. | Opposite Drive End - Endbell Bearing | Fit | | |
| | | 0 Degrees | 60 Degrees | 120 Degrees | |
| | - 4 | 0 ' 0 | Et O IV | | (D) D |
| _ | 54. | 11 | Fit Condition | | (P) Pass |
| | 55. | Bearing Cap Condition | 0 " D' 5 1 D ' 0 | | |
| | | Drive End Bearing Cap | Opposite Drive End Bearing Cap | | |
| (| - | Na | | | |
| | 56. | End Bell Air Seal Fits | | | |
| | | Drive End Air Seal | Opposite Drive End Air Seal | | |
| | <i></i> | List Machine Work Needed Delay | | | |
| | 57. | List Machine Work Needed Below Na | | | |
| | F0 | Technician | | | Cw |
| | 50. L | / | | | CW |
| Ro | ot (| Cause of Failure | | | |
| | 59. | Failure locations | | | |
| | | Bearings | | | |
| | 60. | Root cause of failure | | | |
| | | Wear | | | |

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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.
- **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 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.
- 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.
- 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.
- 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.
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