



KEEPING YOUR FACILITY UP TO SPEED
— EVERY DAY SINCE 1946 —

LR Motor Shop Repairs

Job Number 102773

Prepared for Welspun Tubular (11685)

9301 Frazier Pike
Little Rock AR 72206

Table of Contents

AC Inspection as Found - *LR MOTORSHOP*

AC Inspection - Rev. 2: 10263/01

1.0

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

AC Inspection as Found
Welspun Tubular (11685)
9301 Frazier Pike
Little Rock, AR 72206

FolderID: 102773
FormID: 20055216

AC Inspection - Rev. 2

Location: LR MOTORSHOP

Serial Number: 10263/01

Description:50KW BRUSATORI

Hi-Speed Job Number: 102773

Manufacturer: Other

Product Number: TYPE: VL160L

Spec/ID #: VL160L3W00002

Serial Number: 10263/01

HP/kW: 50 (kW)

RPM: 2400 (RPM)

Voltage: Other

Phase: Three

Hz: 60 (Hz)

Service Factor: 1

Enclosure: TEFC

of Leads: 3

J-box Included: Complete

Coupling/Sheave: None

Date Received: 04/15/2024

Bearing RTDs: No

Stator RTDs: No

Repair Stage: Teardown Inspection



Rewind: No

Shaft Machined Fit Repairs Required: Yes

Heaters: No

Winding Type : Random Wound

Bearing Type: Rolling Element

Priorities Found:  **4 - High**  **7 - Good**

Overall Condition

1. Report Date

04/15/2024

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2. Nameplate Picture



3. Photos of all six sides of the machine.







4. Describe the Overall Condition of the Equipment as Received

Bearings are rough

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?	(Yes) Yes





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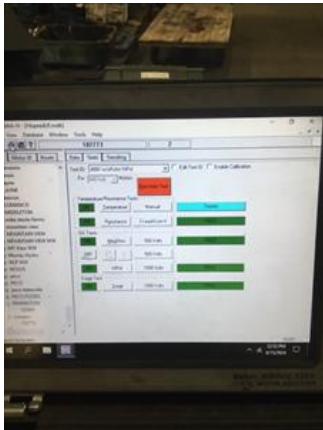
1.4



8. Assembled Shaft Runout	0.001 Inches
9. Assembled Shaft End Play	inches
10. Air Gap Variation <10%	
11. Lead Condition	(P) Pass
12. Lead Length	12 Inches
13. Does it have Lugs?, If so what is the Stud Size?	(Yes) Yes
14. Lead Numbers	U1 V1 W1

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15.	Frame Condition			good
	16.	Fan Condition	(P) Pass	
	17.	Broken or Missing Components		
		Broken fan plug		
Initial Electrical Inspection				
18.	Insulation Resistance/Megger		2000 Megohms	
19.	Winding Resistance			
	1-2	1-3	2-3	
	.2	.2	.2	
	20.	Perform Surge Test	(P) Pass	



21. Number of Stator Slots	48
22. Stator Condition	good
23. Stator Thermistors/Ohms	Na
24. Stator Overloads/Ohms	0.1
Mechanical Inspection	
25. Drive End Bearing Brand	koyo

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26. Drive End Bearing Number-

6211 2zc3



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?	no
31. Drive End Wavy Washer/Snap-Ring Other Retention Device?	no
32. Drive End Bearing Condition	worn
33. Opposite Drive End Bearing Brand	koyo
34. Opposite Drive End Bearing Number-	6211 2zc3



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?	no
39. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	wavy washer
40. Opposite Drive End Bearing Condition	worn
41. Drive End Seal	



42. Opposite Drive End Seal

Na

Rotor Inspection

43. Rotor Type/Material	(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast
44. Growler Test	(Pass) Pass
45. Number of Rotor Bars	36
46. Rotor Condition	good
47. List the Parts needed for the Repair Below 6211 2zc3	
48. Signature of Technician that Disassembled Motor	Trevor Hall

Mechanical Fits- Rotor

49. Shaft Runout	0.001 inches
50. Rotor Runout	
Drive End Bearing Fit	Rotor Body Opposite Drive End Bearing

Na

51. Coupling Fit Closest to Bearing Housing		
0 Degrees	90 Degrees	120 Degrees
2.1552	2.1662	2.1662
52. Coupling Fit Closest to the end of the Shaft		
0 Degrees	60 Degrees	120 Degrees
2.1667	2.1667	2.1666
53. Drive End Bearing Shaft Fit		
0 Degrees	60 Degrees	120 Degrees
2.1661	2.1662	2.1662

54. Drive End Bearing Shaft Fit Condition (P) Pass

55. Opposite Drive End Bearing Shaft Fit			
0 Degrees	60 Degrees	120 Degrees	
2.1655	2.1655	2.1656	
Minimum			
56. Opposite Drive End Bearing Shaft Fit Condition			(P) Pass
57. Shaft Air Seal Fits			
Drive End Air Seal	Opposite Drive End Air Seal		
Na			
Mechanical Fits- Bearing Housings			
58. Drive End - Endbell Bearing Fit			
0 Degrees	60 Degrees	120 Degrees	
3.9372	3.9376	3.9373	
59. Drive End - Endbell Bearing Fit Condition			(F) Fail
Egg shaped			



60. Opposite Drive End - Endbell Bearing Fit			
0 Degrees	60 Degrees	120 Degrees	
3.9371	3.937	3.9366	
61. Opposite Drive End - Endbell Bearing Fit Condition			(F) Fail
Egg shaped			



62. Bearing Cap Condition

Drive End Bearing Cap

Opposite Drive End Bearing Cap

pass



63. End Bell Air Seal Fits

Drive End Air Seal

Opposite Drive End Air Seal

pass

pass

64. List Machine Work Needed Below

Output shaft, opposite drive endbell,

65. Technician

Trevor Hall

Root Cause of Failure

66. Failure locations

Bearings, output shaft. I had to cut off drive end sleeve and bearing.

67. Root cause of failure

Normal wear.



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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.
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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

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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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