

Job Information

Job #: 95245

Date: March 4, 2019

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: Richland Foods

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

Name Plate Information

Manufacturer: Baldor

Enclosure : Totally Enclosed
Fan Cooled

Enclosure Type image

Serial#: Cat: M74154T-4

Model#: Spec:
18J066X176H1

Service Factor: 1.0

Frame: 447

Horsepower/kW: 150

Rated RPM: 1780

Rated Amps: 167

Rated Voltage: 460

Phase: 3

Cycles: 60

Special design: No



Nameplate

DE

ODE

F1

F2

Top



Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: No

Contaminant(s): None

Shaft rotation: —

Contaminant(s) Amt: None

Shaft grounding device present?: Yes

Contaminant Image:



Type of grounding device: Aegis

Shaft runout(TIR-Inbound):

Bearings DE: Worn

Bearings DE make: Koyo

Insulated: No

Bearing DE Size: 6319 2Z

Bearings ODE: Worn

Bearings ODE make: Koyo

Bearing Type: Ball

Bearing ODE Size: 6314 2Z

Bearings Retainer: Yes

Thermal Protection: No

Retainer condition: Bad

Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection

Mechanical Inspection (Continued)

Lubrication Type: Grease

Thermal Protection device DE: —

Lubrication brand inbound: Unknown

Thermal Protection device ODE: —

Lubrication brand outbound: Unknown

Grease Amt DE: 0

Grease Cond. DE: Charred

Grease Amt ODE: 1/4

Grease Cond. ODE: Charred

Seals DE type: N/A

Seals DE size:

Seals DE (inbound) condition :

Seals ODE type: N/A

Seals ODE size:

Seals ODE (inbound) condition
:

Shaft damage cause: Keyway bad

Shaft Image:



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Mechanical Inspection (Continued)

Brg. Image:



Bushings/sleeves image:



Water jacket: N/A

Fan: Ok

Frame cond.: Good



Motor Mount Position: Horizontal/Foot mount

Endbell type: Single piece

Missing parts?

☐ J-Box cover ☐ O-rings ☐ J-Box☐ HH cover ☐ Glands ☐ None

Endbell Image:



Other missing parts



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Mechanical Inspection (Continued)

Air Gap Measurements (N/A on Single Piece Endbell)

Does Air Gap Meet Customer or EASA spec(<10% variation)?

DE @ 0

ODE @ 0

—

DE @ 90

ODE @ 90

DE @ 180

ODE @ 180

DE @ 270

ODE @ 270

AC Electrical Inspection

Number of leads: 3

Terminal Markings:

Length of leads: 11"

REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal Markings Identified By Color:

Size of leads:

1-Blue
2-White
3-Orange
4-Yellow

5-Black
6-No color assigned
7-No color assigned
8-Red

P1-No color assigned
P2-Brown

Lead condition: Good

Lug type:

Connections As Received:

Lug Condition: —

Terminal

Lugs

Lug size:

Lug Attachment: —

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AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 47

Num broken bars: 0

Rotor



Rotor Test Results

Visual: Pass

Growler: Pass

Single phase: Pass

Stator type: Factory

If other, stator type:

Stator condition: Ok

If other, stator condition:

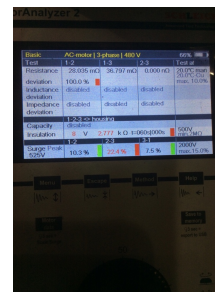
Failure location: Core edge

If other, stator failure:

Stator Image:



Failure Image:



AC Electrical Inspection (Continued)

Winding color: Dull black

Winding image

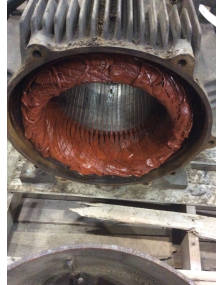
Winding Thermal Protection: No

Winding condition : Solid

Winding Thermal
Protection DE: —

Winding Thermal
Protection ODE: —

Stator test results: Rewind



Megs incoming: Bad

Surge incoming: Bad

Hi-pot incoming: Bad

Winding Resistance Incoming

Phases A to B

Phases B to C

Phases C to A

Resistive imbalance

Incoming

Leads/jumpers: Ok

If other, leads/jumpers:

Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Shaft Condition: Worn

Bearings Retainer: Yes

Type of grounding device: Aegis

Bearing DE Size: 6319 2Z

Shaft runout(TIR-Inbound):

Bearing ODE Size: 6314 2Z

Retainer condition: Bad



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Mechanical Inspection (Continued)

Seals DE condition : Worn

Brg. Seats DE: Good

Seals DE type: N/A

If DE undersized, amt.: .0001

Seals DE size:

Brg. Seats ODE: Good

Seals DE (inbound) condition :

If ODE undersized, amt.: .0002

Seals ODE condition : Worn

Shaft damage: OK

Seals ODE type: N/A

Seals ODE size:

Bushings/sleeves DE: Ok

Seals ODE (inbound) condition :

Bushings/sleeves ODE: Ok

Endbell fits/damage: Good

Foot/Flange condition: Ok

Endbell DE size: 7.8452 (good)

Foot flatness: Pass

Endbell DE insulated?: No

Does Air Gap Meet Customer or EASA spec(<10% variation)?

Endbell ODE size: 5.9069 (lip worn)

—

Endbell ODE insulated?: No

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Conclusion

Component Failure

Multiple: Drive end bearing cage. Drive end bearing cap requires sleeving. D.E. shaft bearing shoulder worn. D.E. Bent .0016.

Cause of Failure

Drive end bearing bearing cage failed.

Comments

Drive end bearing cage is the primary cause of failure. Drive end bearing cap requires sleeving. D.E. shaft bearing shoulder worn. D.E. shaft Bent .0016. Aegis ring destroyed and needs replacing. O.D.E. End bell bearing housing out of tolerance and has lip worn in fit. Windings require rewind. Key way wallowed.

Service Tech name: Terrence Holland

Service Tech signature:

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