

Job Information

Job #: 94706 Date: September 7,

2018

Priority: — Authorized OT: No Authorized by:

Customer Information

Name: Riceland Foods Reason:

Contact: Motor#: PO#:

Application: – Special notes:

Name Plate Information

Manufacturer: Siemens Enclosure: Totally Enclosed Enclosure Type image

Fan Cooled

Serial#: RGZESD Model#: 1LA04496SE42

Service Factor: 1.15 Frame: 449TS

Horsepower/kW: 200 Rated RPM: 1185

Rated Amps: 222 Rated Voltage: 460

Phase: 3 Cycles: 60

Special design: No

Nameplate DE ODE F1 F2 Top













Fax 901-873-5301

CENTRAL ARKANSAS

Not

Available



Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: No Contaminant(s): None

Shaft rotation: Bi-directional Contaminant(s) Amt: None

Shaft grounding device present?: No Contaminant Image:

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Shaft runout(TIR-Inbound):

Type of grounding device:

Bearings DE: Worn Bearings DE make: FAG

Insulated: No Bearing DE Size: 6320 ZZ

Bearings ODE: Worn Bearings ODE make: FAG

Bearing Type: Ball Bearing ODE Size:

Bearings Retainer: Yes Thermal Protection: No

Retainer condition: Good Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection

Not Available



Mechanical Inspection (Continued)

Lubrication Type: Grease Thermal Protection device DE: -

Lubrication brand inbound: Mobile Polyrex EM Thermal Protection device ODE: —

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: Full Grease Cond. DE: Hard

Grease Amt ODE: Full Grease Cond. ODE: Charred

Seals DE type: N/A Seals Image:

Seals DE size:

Not
Available

Seals DE (inbound) condition:

Seals ODE (inbound) condition

Seals ODE type:

Seals ODE size:

N/A

Seals Image 2:

Not Available

Shaft damage cause: None Shaft Image:



Mechanical Inspection (Continued)

Brg. Image:



Bushings/sleeves image:



Water jacket:

N/A

Fan:

Missing

Endbell Image:

Frame cond.:

Bad

Not Available



Motor Mount Position:

Horizontal/Foot mount

Endbell type:

Single piece

Missing parts?

✓ J-Box cover

O-rings

J-Box

☐ HH cover

Glands

☐ None



Other missing parts

Fan



Mechanical Inspection (Continued)

Air Gap Meaurements (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: 6 Terminal Markings:

Length of leads: 12" REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal

Markings Identified By Color:

Size of leads: 1-Blue 5-Black P1-No color assigned

2-White 6-No color assigned P2-Brown

3-Orange 7-No color assigned

Lead condition: Worn 4-Yellow 8-Red

Connections As Received: Lug type:

Lug Condition: — Terminal Lugs

Lug size:

Lug Attachment: - Available

Not





AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Other

Num rotor bars:

Num broken bars:

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: In slot If other, stator failure:

Stator Image: Failure Image:







AC Electrical Inspection (Continued)

Winding color: Like new Winding image Winding Thermal Protection: No

Winding condition: Solid

Winding Thermal Protection DE:

Winding Thermal
Protection ODE:

Stator test results: Rewind

Not Available

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 Lead jumper Image. :

Not Stable Not Available



Conclusion

Component Failure

Windings shorted, shaft repair, EB cracks

Cause of Failure

Alignment problem possibly

Comments

ODE bearing failure allowed rotor to rub stator causing insulation to fail. Appears the heat generated caused the fan to catch fire and burn up leaving only a small piece found lodged in the cooling fins on the top under the fan cover. Motor appears to be in a severe environment and has severe rust corrosion.

Lynn Mck I and a

Bearings show signs of severe vibration possibly due to miss alignment or imbalance.

Service Tech name: Lynn McDonald

Service Tech signature:

7030 Ryburn Drive Millington, TN 38053 Phone 901-873-5300 Fax 901-873-5301