

## **Job Information**

94789 Job #: Date: October 5, 2018

Priority: Authorized OT: No Authorized by:

## **Customer Information**

Name: Sage Foods Reason:

Contact: Motor#: PO#:

Application: Special notes:

## **Name Plate Information**

Manufacturer: Baldor Enclosure: Totally Enclosed **Enclosure Type image** 

Air Over (TEAO)

Serial#: Model#: Spec:

10G517X209G2

Service Factor: 284T 1.15 Frame:

Horsepower/kW: 25 Rated RPM: 1770

Rated Amps: 60/30 Rated Voltage: 230/460

Phase: 3 Cycles: 60

Special design:

No

Nameplate DE ODE F1 F2 Top















## **Mechanical Inspection**

Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE:

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Contaminant(s): Yes None

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

Shaft grounding device No

Worn

Contaminant Image: present?:

Insulated: Bearing DE Size: 6311 D 2RS No

Bearings ODE: Worn Bearings ODE make: NTN

Bearing Type: Bearing ODE Size: 6309 2RS Ball

Thermal Protection: Bearings Retainer: Yes No

Retainer condition: Good Thermal Protection Type:

Bearing Type Image



Bearing Make Image



Bearing Retainer Image

Bearings DE make:

**RBC** 



Thermal Protection



Not **Available** 



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: Other

Grease Amt ODE: Full Grease Cond. ODE: Other

Seals DE type: Seals Image: Other

Seals DE size:

Seals DE (inbound) condition:

Seals Image 2:

Seals ODE type:

Seals ODE size:

Shaft damage cause:

Seals ODE (inbound) condition

None

N/A

Shaft Image:



Not Available



Brg. Image:



Bushings/sleeves image:

Not Available

Water jacket:

N/A

Fan:

N/A

Endbell Image:

Frame cond.:

Good

Not Available 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



6

Other missing parts

2ea. Mount bolts on connection box.



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: 9 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 5-Black P1-No color assigned

2-White 6-No color assigned P2-Brown

3-Orange 7-No color assigned

Lead condition: Good 4-Yellow 8-Red

Connections As Received: Lug type:

Lug Condition: — Terminal Lugs

Lug size:

Lug Attachment: — Not Available





# **AC Electrical Inspection (Continued)**

Rotor Type: Cast Aluminum

Ok

Num rotor bars: 40

Num broken bars: 0

Rotor



### **Rotor Test Results**

**Rotor Condition:** 

Visual: Pass Growler: Pass Single phase: Pass

Stator type: Factory If other, stator type:

Stator condition: Ok If other, stator condition:

Failure location: Other If other, stator failure:

Stator Image: Failure Image:





Not



## **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: Salvageable

Available

Megs incoming: Good Surge incoming: Good Hi-pot incoming: Good

**Winding Resistance Incoming** 

Phases A to B Phases B to C Phases C to A Resistive imbalance

Incoming 0.309 0.308 0.309 0.3

Leads/jumpers: Ok Lead jumper Image. :

If other, leads/jumpers:

# **Mechanical Inspection**

Inspect bolt holes and fasteners. Validate correct fasteners.

Shaft Condition: Good Bearings Retainer: Yes

Type of grounding device: None Bearing DE Size: 6311 D 2RS

Shaft runout(TIR-Inbound): .001 Bearing ODE Size: 6309 2RS

Retainer condition: Good

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Seals DE condition: Worn Brg. Seats DE: Good

Seals DE type: Other If DE undersized, amt.:

Seals DE size: Brg. Seats ODE: Good

Seals DE (inbound) condition: If ODE undersized, amt.:

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: 4.7247 Foot flatness: Fail

Endbell DE insulated?: No

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

variation)?

Endbell ODE insulated?: No

Endbell ODE size:

3.9375



## Conclusion

### **Component Failure**

Bearings.

#### **Cause of Failure**

Fluting on opposite drive end bearing.

#### **Comments**

All electrical and mechanical checks were within specs. However after cutting the bearings and examining them I found definite signs of electrical fluting on the opposite drive end bearing which caused premature bearing failure. Also found the grease blackened from electrical discharge as well. Both heaters ohmed out at approximately 130 ohms.

Service Tech name: Terrence Holland

Service Tech signature:

WEST TENNESSEE CENTRAL ARKANSAS 6812 Lindsey Rd. Little Rock, AR 72206 Phone 501-375-9178

Fax 501-375-4254