

### **Job Information**

95316 Job #: Date: April 3, 2019

Priority: Authorized OT: No Authorized by:

**Customer Information** 

Name: Sage Foods Reason:

Contact: Motor#: PO#:

Application: Special notes:

**Name Plate Information** 

1.15

No

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

1775

Fan Cooled

Frame:

KAR87DRN132L4/ Serial#: 87.66127266010003 Model#:

> X1650 L/DH

Horsepower/kW: 9.2 Rated RPM:

Rated Amps: 33/16.5 Rated Voltage: 230/460

Phase: 3 Cycles: 60

Nameplate DE ODE F1 F2 Top



Service Factor:

Special design:







## **Mechanical Inspection**

Inspect bolt holes and fasteners. Validate correct fasteners.

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

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

Shaft grounding device

present?:

No

Type of grounding device: None

Shaft runout(TIR-Inbound):

Bearings DE: Worn Bearings DE make: FAG

Insulated: No Bearing DE Size: 6309 2RS

Bearings ODE: Worn Bearings ODE make: FAG

Bearing Type: Ball Bearing ODE Size: 6209 2RS

Bearings Retainer: Yes Thermal Protection: No

Retainer condition: — Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



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: Gritty

Grease Amt ODE: Full Grease Cond. ODE: Gritty

Seals DE type: Isolators Seals Image:

Seals DE size: 40\*62\*7

Slinger

Seals DE (inbound) condition: Good

Seals Image 2:

Seals ODE size:

Seals ODE type:

Seals ODE (inbound) condition

Shaft damage cause: None Shaft Image:



Brg. Image:



Water jacket: Other Fan: Ok Frame cond.: Good





Motor Mount Position: Horizontal/Foot mount Endbell type: Single piece

Missing parts? Endbell Image:

☐ J-Box cover ☐ O-rings ☐ J-Box

☐ HH cover ☐ Glands ☐ None

Other missing parts







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: 6" 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: Good Terminal Lugs

Lug size:

Lug Attachment: Acceptable







# **AC Electrical Inspection (Continued)**

Rotor Type: Cast Aluminum

Ok

Num rotor bars: 29

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:





## **AC Electrical Inspection (Continued)**

Winding color: Like new Winding image Winding Thermal Protection: Yes

Winding condition: Solid

Winding Thermal \_\_\_\_ Protection DE:

Winding Thermal Protection ODE:

Stator test results: Salvageable

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

Leads/jumpers: Ok

If other, leads/jumpers:

# **Mechanical Inspection**

Inspect bolt holes and fasteners. Validate correct fasteners.

Shaft Condition: Good Bearings Retainer: No

Type of grounding device: None Bearing DE Size: 6309 2RS

Shaft runout(TIR-Inbound): Bearing ODE Size: 6209 2RS

Retainer condition: -



Seals DE condition: Worn Brg. Seats DE: Good

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

Seals DE size: 40\*62\*7 Brg. Seats ODE: Good

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

Seals ODE condition: None Shaft damage: OK

Seals ODE type: Isolators

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: 3.9378 Foot flatness: Pass

Endbell DE insulated?: No

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

variation)?

Endbell ODE insulated?: No

Endbell ODE size:

3.3468



### Conclusion

Component I	Failure
-------------	---------

Gearbox oil dirty/contaminated.

#### **Cause of Failure**

Gearbox oil

#### **Comments**

Motor components checked good both mechanically and electrically. Recommend recondition of motor, plus a flush and cleaning for the gearbox assembly.

Service Tech name: Terrence Holland

Service Tech signature: