

## Job Information

Job #: 94944

Date: November 28, 2018

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: WELSPUN

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer:	Wet	Enclosure :	Totally Enclosed Fan Cooled
Serial#:	DERA315-22	Model#:	1ETEIFR1XX1600 40
Service Factor:	1.0	Frame:	315S/M4
Horsepower/kW:	185KW	Rated RPM:	1780
Rated Amps:	271	Rated Voltage:	480
Phase:	3	Cycles:	60
Special design:	No		

Enclosure Type image



Nameplate

DE

ODE

F1

F2

Top



## 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:

Shaft runout(TIR-Inbound):

Bearings DE: Worn Bearings DE make: Other

Insulated: No Bearing DE Size: 6319Z

Bearings ODE: Worn Bearings ODE make: SKF

Bearing Type: Ball Bearing ODE Size: 6316Z

Bearings Retainer: Yes Thermal Protection: Yes

Retainer condition: — 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: Mobile Polyrex EM

Thermal Protection device ODE: —

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: Full

Grease Cond. DE: New

Grease Amt ODE: Full

Grease Cond. ODE: New

Seals DE type: Slinger

Seals Image:

Seals DE size:

Not  
Available

Seals DE (inbound) condition :

Seals ODE type: Slinger

Seals Image 2:

Seals ODE size:

Not  
AvailableSeals ODE (inbound) condition  
:

Shaft damage cause: None

Shaft Image:

**WEST TENNESSEE**

7030 Ryburn Drive  
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Phone 901-873-5300  
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**CENTRAL ARKANSAS**

6812 Lindsey Rd.  
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Phone 501-375-9178  
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## Mechanical Inspection (Continued)

Brg. Image:



Bushings/sleeves image:

Not  
Available

Water jacket:     Ok



Fan:     Broken



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



## 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: 6

Terminal Markings:

Length of leads:

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: Good

Lug size:

Lug Attachment: Acceptable

Terminal



Lugs



## AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

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: Other

If other, stator failure:

Stator Image:



Failure Image:



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## AC Electrical Inspection (Continued)

Winding color: Like new

Winding image

Winding Thermal Protection: Yes

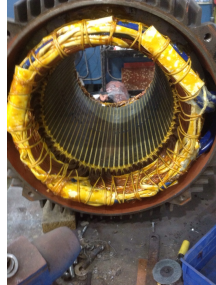
Winding condition : Solid

Winding Thermal Protection DE: Good

Winding Thermal Protection ODE: Good

Not Available

Stator test results: Salvageable



Megs incoming: Good

Surge incoming: Good

Hi-pot incoming: Good

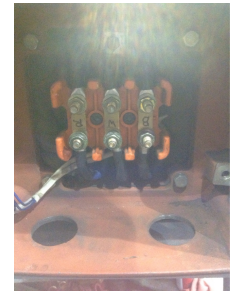
### Winding Resistance Incoming

	Phases A to B	Phases B to C	Phases C to A	Resistive imbalance
Incoming	15.736	16.099	15.738	2.3

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:

Bearing DE Size: 6319

Shaft runout(TIR-Inbound):

Bearing ODE Size: 6316

Retainer condition: —



MILLINGTON, TN

LITTLE ROCK, AR

## Mechanical Inspection (Continued)

Seals DE condition : Worn

Brg. Seats DE: Good

Seals DE type: Slinger

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: Slinger

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: 7.8749 Good

Foot flatness: Pass

Endbell DE insulated?: No

Does Air Gap Meet Customer or EASA spec(&lt;10% variation)?

Endbell ODE size: 6.6938Good

—

Endbell ODE insulated?: No

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MILLINGTON, TN

LITTLE ROCK, AR

## Conclusion

### Component Failure

### Cause of Failure

### Comments

DE AND ODE BEARINGS HAD FLUTTING ODE BEARING ALSO Had FRETTING ,  
Needs New Bearings and Fan number 6764.3500

Service Tech name: Robert Wiley

Service Tech signature:

A handwritten signature in black ink that reads 'Robert Wiley'.

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