

## Job Information

Job #: 137790

Date: July 23, 2018

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: Nucor-Yamato steel co.

Reason:

Contact: Rene Daigle

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: Toshiba Corp.

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: 8716 455

Model#:

Service Factor:

Frame: DS810

Horsepower/kW: 24.6

Rated RPM: 550



Armature

Volts 116

Amps 252

Fields

Volts 230

Amps 252

Nameplate

DE

ODE

F1

F2

Top



## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Yes

Contaminant(s): Dirt

Shaft rotation: CCW

Contaminant(s) Amt: Gallon

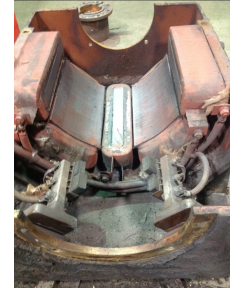
Shaft Condition: —

Contaminant Image:

Shaft grounding device present?: No

Type of grounding device:

Shaft runout(TIR-Inbound): .001



Bearing Type Image



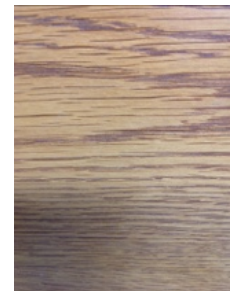
Bearing Make Image



Bearing Retainer Image



Thermal Protection



Lubrication Type: Grease

Thermal Protection device DE: N/A

Lubrication brand inbound: Mobile Polyrex EM

Thermal Protection device ODE: N/A

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: Full

Grease Cond. DE: New

Grease Amt ODE: Full

Grease Cond. ODE: New

### WEST TENNESSEE

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

### CENTRAL ARKANSAS

6812 Lindsey Rd.  
Little Rock, AR 72206  
Phone 501-375-9178  
Fax 501-375-4254

## Mechanical Inspection (Continued)

Brushholders	Number	8
	Condition	Replace
	Size	0222
	Spring type	Constant tension

Brushes	Number	8
	Size	NY-5-06-005
	Shunt Len.	5 3/4
	Insulated	Yes
	TermType	

Brg Image



Shaft Image



Brushing/sleeves



End bell



Water jacket: N/A

Fan: N/A

Frame cond.: Bad

Not  
Available

Not  
Available



Motor Mount Position: Horizontal/Foot mount

Foot/Flange condition: Ok

Foot flatness: Pass



MILLINGTON, TN

LITTLE ROCK, AR

## Mechanical Inspection (Continued)

Missing parts?

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

Other missing parts

### 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

## Electrical Inspection

☐ Move armature imbalance to Assemble

Commutator: Salvageable

## Winding Inspection

Meg Test IP to Flds: Bad

Polarity Check IP to Flds: —

Meg Series to Shunt: —

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## DC Electrical Inspection

Brushes: Normal wear

Brush Image:



Brush holders: Salvageable Qty. 4

Insulators: Salvageable Qty.

Lead support stud: Salvageable Qty.

Alternate brush image:



Rocker ring: Salvageable Qty.

Commutator Type: Tig welded

Commutator images

Commutator Hardness: Good

Commutator Condition : Oil soaked

Commutator Film: Ok



Armature type: Factory If other

Failure mode: Ok If other

Failure location: Front V ring If other

Armature condition: Solid If other

Winding color: Still has color

Armature images



## DC Electrical Inspection (Continued)

### Armature Test Results

Megs: Bad Hi-pot: Good Core loss: Good

Armature image



### Fields condition

Series/Stab condition: Ok

Fields condition image:

Shunts condition: Ok

InterCoils condition: Ok



### Fields test results

Series/Stab Meg: Ok Hi Pot: Ok Resistance: Ok

Shunts Meg: Bad Hi Pot: Ok Resistance: Ok

InterCoils Meg: Bad Hi Pot: Ok Resistance: Ok

Thermistors: None

Field Test image

RTD: None At

Thermostat: None

Leads/jumpers:     Ok

Lead jumper Image:



## Conclusion

### Component Failure

Armature and field failure

### Cause of Failure

Insulation failure

### Comments

Service Tech name:     Dan Mahan

Service Tech  
signature:

A handwritten signature in black ink, appearing to read 'D. Mahan', followed by a horizontal line.