



REFURBISHMENT & REMANUFACTURING SERVICES BENEFITS:

- OPTIMIZED SERVICE LIFE
- FACTORY DIRECT SERVICE
- SCHEDULED PREVENTATIVE MAINTENANCE
- LOWER COST



CSWX

ServoWeld Refurbishment Services

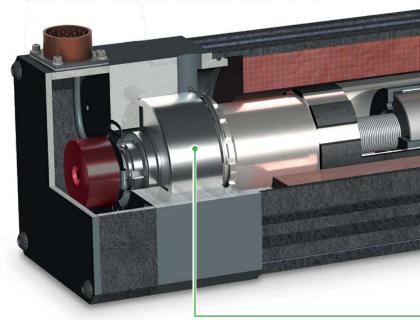
REFURBISHMENT SERVICE

2: REPLACE WIPER/SCRAPER COMPONENTS

1: REPLACE THRUST ROD



- 3: ACTUATOR IS VISUALLY INSPECTED FOR WORN OR BROKEN COMPONENTS
- 4: CLEAN ROLLER SCREW / NUT ASSEMBLY
- 5: LUBRICATE ROLLER SCREW / NUT ASSEMBLY
 Factory original lubrication, same as used in new actuators



6: ACTUATOR RE-ASSEMBLY

7: FUNCTIONAL TEST

 Refurbished and remanufactured ServoWeld actuators must pass the same testing and validation as new ServoWeld actuators

NOTE: Any additional components that need to be replaced will be an additional charge. (e.g. broken connectors, missing rod ends, etc.)

CONTACT TOLOMATIC FOR AN RMA (RETURN MATERIAL

Complete Verification Testing is Performed on Each Actuator

Properly applied, every new and remanufactured ServoWeld actuator shipped will provide millions of cycles of maintenance free performance.



Testing parameter results in progress for the Functional Test procedure.

We verify the performance of each new, refurbished or remanufactured actuator before delivery to ensure they conform to Tolomatic's high standard of performance.

A. High POT (High Potential/High Voltage Test)

This standard electric motor test procedure is a 3-part test that checks the insulation system of the assembly to verify proper armature and thermal wire insulation.

Tolomatic

ServoWeld Remanufacturing Services



REMANUFACTURING SERVICE

- **1: REPLACE THRUST ROD**
- 2: REPLACE WIPER/SCRAPER COMPONENTS
- 3: VISUALLY INSPECT FOR ADDITIONAL WORN OR BROKEN COMPONENTS
- 4: **<u>REPLACE</u>** ROLLER SCREW / NUT ASSEMBLY
- 5: REPLACE MAIN BEARING
- 6. ACTUATOR RE-ASSEMBLY 7. FUNCTIONAL TEST

WARRANTY:

1 year from date of shipment

4: A <u>REPLACE</u> ROLLER SCREW/NUT ASSEMBLY

5: A <u>REPLACE</u> MAIN BEARING

- These interacting components are critical to create thrust and maintain high force repeatability. The main bearing and roller screw/nut assembly work together for optimal actuator performance. Some damage cannot be determined visually so replacing all three ensures continued reliable service.
- A These are critical load bearing components NOTE: Any additional components that need to be replaced will be an additional charge. (e.g. broken connectors, missing rod ends, etc.)

AUTHORIZATION) BEFORE SHIPPING ANY ACTUATOR

B. Functional Testing

Performed with Tolomatic motion control components and dedicated data acquisition equipment. This test quantifies these parameters - stroke length, torque under no load, input current vs average force, input current vs force standard deviation - using an electronic load cell in conjunction with data acquisition equipment.

C. Electronic phasing of ServoWeld actuator and feedback device (Encoder, Resolver, Feedback Device) Using a fixed current and a specially designed fixture the feedback device is physically and electronically aligned relative to the phasing of the ServoWeld motor.

D. Tolomatic System Test Using a single-axis control unit the test ensures that the feedback device is properly aligned with the poles of the ServoWeld motor.

The Tolomatic Difference Expect More From the Industry Leader:



actuator.

actuator to meet

your requirements.

ServoWeld® Actuators Electric Linear Actuators

challenging

application

requirements.

mounting options.

Pneumatic Actuators Power Transmission Products

product questions

from Tolomatic's

industry experts.

EXCELLENCE IN MOTION

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL = ISO 9001 = Certified site: Hamel, MN

assembly.

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