

J. E. Myles, Inc

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Free Evaluation 13 Month In-Service Warranty

Design & Remanufacturing of Servo Hydraulic Equipment

Test Lab Services

Servo Hydraulic Test Equipment Remanufacturing Fatigue-Rated Servo Rotary and Linear Actuators, including: *Pegasus/Schenk *Servotest *Shore Western *Instron *Team *MTS

Remanufacturing Process

- Rebuilt to factory specifications
- Grind-chrome-grind piston rods
- Hone barrels
- Machine pistons to size and coat to manufacturer's specs as needed
- Inspect rod bearings; if necessary, replace with new
- Replace all seals
- Test to manufacturer's specs, including:
- Cycle test at system pressure and measure leakage





Servovalve Remanufacturing

- Moog servo valves are Moog factory rebuilt to current engineering standards
- Statically and dynamically tested
- 50 mA 760s now upgraded to carbide ball
- Moog and MTS (Moog) 2 year "Same as New" warranty
- Vickers, Rexroth, Pegasus and all other manufacturers repaired

Test Lab Valve

Servo Valve Upgrades (Trade-in discounts available!)

- Upgrade with rugged **Moog test lab-rated servo valves**
- Replace obsolete Pegasus, Moog, Ultra, and Atchley servo valves
- Replace lower performance off-brand Star. Rexroth and Vickers servo valves
- Replace Pegasus 3-stage valves with high performance Moog 79 servo valves
- G761 50 mA test valves now stocked in Troy (MTS equivalent)

Pump Remanufacturing

Remanufacture all makes/models, including:

*Rexroth *Denison *Oilgear *Vickers *Parker *IMO

Remanufacturing Process

- Grind and lap or replace port plate •
- All wear surfaces reworked or replaced
- Refinish all contacting surfaces
- Grind-chrome-grind stroking piston
- All bearings and seals replaced •
- Test to specs, including checking for case drain leakage

(Note: Compensator response, leakage, etc. all verified at full operating pressure)



Hydraulic Pump Rooms & Power Supplies



- St. Lawrence-Troy manufactures Fatigue Rated Servo-Hydraulic Power Supplies and Pump Rooms
- Specifically designed for test labs
- 5000 psi rated components
- High efficiency filtration and long life pump design combine to provide the most reliable hydraulic power unit design

Equipment to Improve Test Lab Reliability & Capacity

- Low micron final sandwich filters for single and dual Moog 760 series servo valves
- Schroeder high performance high dirt-holding replacement elements
- Off-line cooling/filtration loops reduce ISO particle count
- Portable and in-line particle monitors real time data
- Water sensors
- Oil analysis service for both chemistry and ISO particle count
- Accumulators (reduce line shock) and pulse-tones (reduce pump noise)
- Central hydraulic systems total system responsibility
- Stand-alone hydraulic systems
- Weldless plumbing systems designed and installed

Hydraulic System Field Service

- On-site maintenance of servo hydraulic systems and components
- Preventive maintenance programs (filters, accumulators, hoses, oil analysis, etc.)
- Hydraulic hoses pre-flushed to ISO specification and proof-tested
- Oil analysis

(Let us help you lower your ISO code with high efficiency glass media filter elements)



Transportation Simulation

Functional and Validation Testing Services (Also available: High speed camera photography)



6-Axis 6,000 hp Transportation Simulator



Real World Rail Impact Tester Full scale simulation of rail car coupling ("humping")

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Free Evaluation 13 Month In-Service Warranty Design & Remanufacturing of Hydraulic Servo Actuators

Test Lab Linear Servo Actuator Remanufacturing

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Remanufacturing Procedure for Fatigue Rated Rotary Actuators

1. INSPECTION



- Inspect actuator for external damage
- Remove servovalve
- Disassemble



• Inspect components for wear and damage



- Determine which seal kit is required; or manufacture seals if obsolete
- Inspect and test LVDT
- Take measurements of rod, piston, tube, and end caps

2. QUOTE REBUIILD/REPLACEMENT W/TIIME FACTORS

- Actuator rebuild
- Servovalve Moog factory rebuild or replacement of obsolete servovalve with Moog test lab valve
- Swivel rebuild



- 3. REMANUFACTURE COMPONENTS (AS REQUIRED)
 - Grind/chrome/grind rod
- Rebuild piston outer diameter; or replace piston
- Resurface tube inner diameter; or replace tube
- Remove material and prepare bearing surfaces
- Bond coating onto end caps and piston
- Machine coated surfaces for exact fit
- Reassemble actuator

4. Test

- Pressurize actuator and check for internal and external leakage to meet or exceed specifications
- Cycle actuator with servo valve
- Verify proper LVDT output and position

5. FIINIISHIING PROCESS

- Degrease, clean and paint actuator
- Ready to ship



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Design & Remanufacturing of Hydraulic Servo Actuators

Test Lab Rotary Servo Actuator Remanufacturing

Remanufacturing Procedure for Fatigue Rated Rotary Actuators

1. INSPECTION

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- Inspect actuator for external damage
- Remove servovalve
- Disassemble
- Inspect components for wear and damage
- · Determine which seal kit is required; or manufacture seals if obsolete
- Inspect and test rotary encoder
- Take measurements of components

2. QUOTE REBUIILD/REPLACEMENT WIITH TIME FACTORS

- Actuator rebuild
- Servovalve Moog factory rebuild or replacement of obsolete servovalve with new Moog test lab valve
- Replacement of rotary encoder when needed

3. REMANUFACTURE COMPONENTS (AS REQUIRED)

- Grind/chrome/grind shaft
- Remove any coating and prepare surfaces
- Bond coating onto wings
- Machine coated surface of wings for exact fit
- Reassemble actuator

4. TEST

- Pressurize actuator and check for internal and external leakage to meet or exceed specifications
- Cycle actuator with servo valve
- Verify proper rotary encoder output and position

5. FIINIISHIING PROCESS

- Degrease, clean and paint actuator
- Ready to ship

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Free Evaluation 13 Month In-Service Warranty Design & Remanufacturing of Hydraulic Service Manifolds

Test Cell HSM Remanufacturing

Remanufacturing Procedure for Hydraulic Service Manifolds

1. INSPECTION

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- Inspect HSM for external damage
- Disassemble
- Inspect components for internal wear and/or damage
- Accumulator: determine if bladder or new seals are required
- Determine which seal kit is required; or Manufacture seals if obsolete
- Inspect, test and calibrate pressure gauge

2. QUOTE REBUIILD/REPLACEMENT OF COMPONENTS WIITH TIME FACTORS

- Rebuilding/replacing accumulators
- Replacing filter element or complete filter assembly
- Rebuilding/replacing valves
- Replacing all seals

3. REMANUFACTURE COMPONENTS (AS REQUIIRED)

- Bladder accumulator: replace bladder
- Piston accumulator: replace piston and hone barrel if required; or, replace barrel
- Reassemble accumulator
- Change filter elements
- Repair or replace valves

4. TEST

- Pre-charge accumulator to specifications
- Pressurize and check for internal and external leakage to meet or exceed specifications
- Test for flow

5. FIINIISHIING PROCESS

- Degrease and clean
- Paint, if required
- Ready to ship

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