



MTS Routine Maintenance

MTS Acumen™ Electrodynamic Load Frames

Eligible MTS Acumen Load Frame Models

- » Acumen 1
- » Acumen 3

Your MTS Acumen Test System is designed to require minimal maintenance, and MTS Routine Maintenance provides the correct amount of care needed for optimal performance. Regularly scheduled maintenance performed by MTS field service engineers can ensure proper working condition and extend the operating life of the load frame.

Regular maintenance also identifies issues that may affect data integrity so that you know your test results are accurate. With MTS Routine Maintenance, you can rely on MTS to perform the checks and adjustments necessary to achieve the best possible results with your MTS Acumen test system.

On a routine maintenance visit, MTS field service engineers check the hardware, electronics and current condition of the system. We inspect the crosshead operation, actuator condition, transducer alignment, cables, internal power supply and more. We will also verify overall system performance.

At the end of each routine maintenance visit, we'll provide a report of all services performed, current equipment condition and any recommendations, if necessary. You'll have the information you need to make decisions about your test equipment and confidence in knowing that you are able to address issues before they become problems. You'll also know that you are enhancing the productivity, reliability and longevity of your test equipment.

MTS Acumen™ Electrodynamic Load Frames

Recommended service to be performed at each running time interval noted

Calendar Time Using 8 Hour Run Time Rate Per Day	Daily	Monthly	Annually
Running Time - Hours	8	160	2,000
Clean Work Area / Machine Surfaces	√		
Check Frame Mounted Control Emergency Stop		√	
Check Remote Emergency Stop (If Present)		√	
Check Test Area Enclosure - Open Door Applies Low Velocity		√	
Load Frame / Crosshead			
Check Crosshead Locks For Proper Operation			MTS
Check Crosshead Lift Belt For Wear			MTS
Check / Adjust Crosshead Lift Belt Tension			MTS
Check / Clean Crosshead Lift Screws			MTS
Check / Clean Columns			MTS
Assure Crosshead Movement Is Smooth			MTS
Actuators			
Check Cooling System Is Operational			MTS
Clean Exposed Cooling Surfaces			MTS
Assure Actuator Movement Is Smooth			MTS
Check Actuator Guidance Mechanism			MTS
Check Brake Operation			MTS
Check Anti-Rotate Mechanism			MTS
Check For Excessive Contamination			MTS
Electrical			
Assure Displacement Transducer Is Clean			MTS
Verify Displacement Transducer Is Aligned			MTS
Confirm Reference Transducer Is Aligned			MTS
Verify Reference Transducer Center Position			MTS
Check Internal Cables For Abrasion			MTS
Check Internal Cable Connectors			MTS
Check Internal Grounding			MTS
Check Internal Power Supplies			MTS
Clean Electronic Devices			MTS
System			
Check Frame Mounted Control Emergency Stop			MTS
Check Remote Emergency Stop (If Present)			MTS
Check System Detects Velocity Limit When Enabled			MTS
Check Test Area Enclosure - Open Door Applies Low Velocity			MTS
Check Frame Mounted Control - High Power Prohibit Functions			MTS
Verify Unlocked Crosshead Generates Interlock			MTS
Check System Cable Bundle Connectors			MTS
Check System Cable Bundle For Abrasions			MTS
Check Supplemental Ground Attached			MTS
Verify Tuning Parameters Correct For Stable Control Modes			MTS
Verify Load Frame Protection Limits Correct And Enabled			MTS

