



MTS ReNew™ Upgrades

Revitalize existing test systems with a controls upgrade

Benefits

- » Proactively manage controller obsolescence and avoid unplanned downtime
- » Provide a low-cost, non-capital alternative or a complement to new capital equipment
- » Standardize lab operations on MTS TestSuite™ Software as a common platform

Infrequently used test systems can slow down your test program; yet it may be difficult to secure funding for new equipment. You now have a cost-effective way to improve the performance of your existing test systems and increase the productivity of your lab. MTS ReNew upgrades offer dependable, more capable electronics and software at minimal cost. With an MTS ReNew upgrade, you can leverage your existing test frame and accessories investment, and take advantage of one of the most robust and flexible controller software in the industry.

To revitalize your existing test system with an MTS ReNew upgrade, MTS replaces the outdated controls of your existing test system with state-of-the-art MTS digital controls and a personal computer running best-in-class MTS TestSuite Software. You benefit from the latest in MTS controller and software innovation while maximizing

your current testing assets. You can also use your existing accessories or other MTS accessories, using connectors that are compatible with your system.

MTS offers several options for ReNew upgrades, each designed to meet your budget and unique requirements. We can update a wide variety of electromechanical and static-hydraulic load frames, and can even design custom solutions to meet your specific needs. ReNew upgrades will provide the common interface, software, and electronics you need for optimum test data collection and analysis.

With ReNew upgrades, you also receive unparalleled service and support from MTS. Our field service engineers have extensive material testing experience and knowledge, and work to bring you the best return on your upgrade investment.

be certain.

Three Upgrade Paths to Meet Your Specific Needs

1. Electromechanical Upgrades

There are 32 off-the-shelf ReNew products that include upgrades to controllers, electronics and data acquisition systems for specific load frames. The standardized ReNew upgrades are available for the controls of several commonly used load frames, including:

- » *MTS Alliance
- » *MTS Sintech
- » *MTS Qtest
- » *MTS Adamel
- » **Instron® 1100/4200/4400/5500 series and more

2. Static-Hydraulic Upgrades

ReNew upgrades have been expanded to a class of static-hydraulic test frames including:

- » **SATEC™
- » **Instron®
- » **Tinius Olsen™
- » **Baldwin®
- » and others

3. Custom Solutions

These solutions integrate MTS materials load frames with 3rd party accessories, components or sub-systems. They include designing and building custom test fixtures for materials and universal testing machine (UTM) applications. They also encompass creating customer-specific accessories for MTS Criterion®, Exceed®, Landmark™ and Acumen™ load frames.



*MTS load frames are discontinued products

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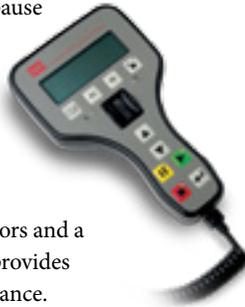
MTS ReNew Features

Integrated Digital Controller

- » Multi-point device linearization for any sensor (load cells, extensometers, strain gages, etc.)
- » Load, Stress, or Strain-rate control available
- » Ability to run MTS TestSuite TW and/or MTS TestWorks 4 (for backwards compatibility)
- » Up to 1000 Hz DAQ rate
- » A 1000 Hz control rate
- » 20-bit resolution
- » Built-in USB 2.0 for PC communication
- » Self-ID capability for calibration and auto-ranging
- » Two optional strain inputs in addition to the system load cell
- » Three optically isolated digital inputs and outputs (two if a clutch system)
- » Two BNC monitor connectors
- » A test area enclosure interlock connector

Convenient, Ergonomic Handset

The MTS handset allows the operator to perform standard functions such as start, stop, pause, and crosshead positioning while standing close to the test specimen. The handset can display test status messages, performance messages, and results. Two programmable function keys are set up in the software as digital inputs, allowing users to define test functions such as start test, pause and hold position. The handset features a small, ergonomic design for both right-handed and left-handed operators and a large display that provides information at a glance.



System Safety

To help ensure operator safety, MTS testing systems integrate an array of safety features, including:

- » Mechanically adjustable limits to stop the crosshead at predetermined points
- » Motor overheat device on MTS replacement motors to automatically turn off the motor power supply
- » Ability to set limits for load, extension, strain, or any other data channel
- » Integrated test area enclosure interlock

MTS TestSuite Software

Industry-leading MTS TestSuite software has the power to streamline your testing procedures by adapting to the way you work. You can readily configure MTS TestSuite software to handle your most demanding requirements, while maintaining an interface that is user-friendly – even for the novice operator. Intuitive menus and controls make initial test definition, test execution, and report generation easy for both simple and complex testing.



Product Offerings

Brand Name & Model	Machine Requirements	Comments
MTS: Adamel	As is (IEEE).	All ReNew capabilities.
MTS: Alliance & QTest	CSM Motor/Amp Sable, ADC, GFCC, Mongoose.	None.
Instron: 42XX, 43XX, 44XX, 45XX	Must have Instron machine interface card.	All capabilities. Data acquisition speed limited by Instron IEEE interface card.
Instron: 44XX & 55XX	Must be sound mechanically and electronically.	All ReNew capabilities including: computer-controlled testing, high data acquisition rates, electronic calibration, and a manual control handset.
Instron: 11XX, 42XX, 45XX, 6027	Must be sound mechanically. Motor, amp, and electronics replaced.	

ReNew System Specifications

Hardware:	MTS controller/IEEE Interface
Software:	MTS TestSuite
Standard data channels:	Load, Time, Strain, Extension
Optional analog output:	Yes, 2 available, except on IEEE controlled systems
Manual control handset:	Yes (optional)
Emergency stop:	On existing system or with ReNew electronics
Voltage requirements:	110/220 for MTS controllers, or Per computer requirements for IEEE controlled systems, or 110/220 V (5 kip <), 220 V (10 kip >), Individual systems may vary



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Specifications are subject to change.
 Contact MTS Systems Corporation for specifications critical to your needs.

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