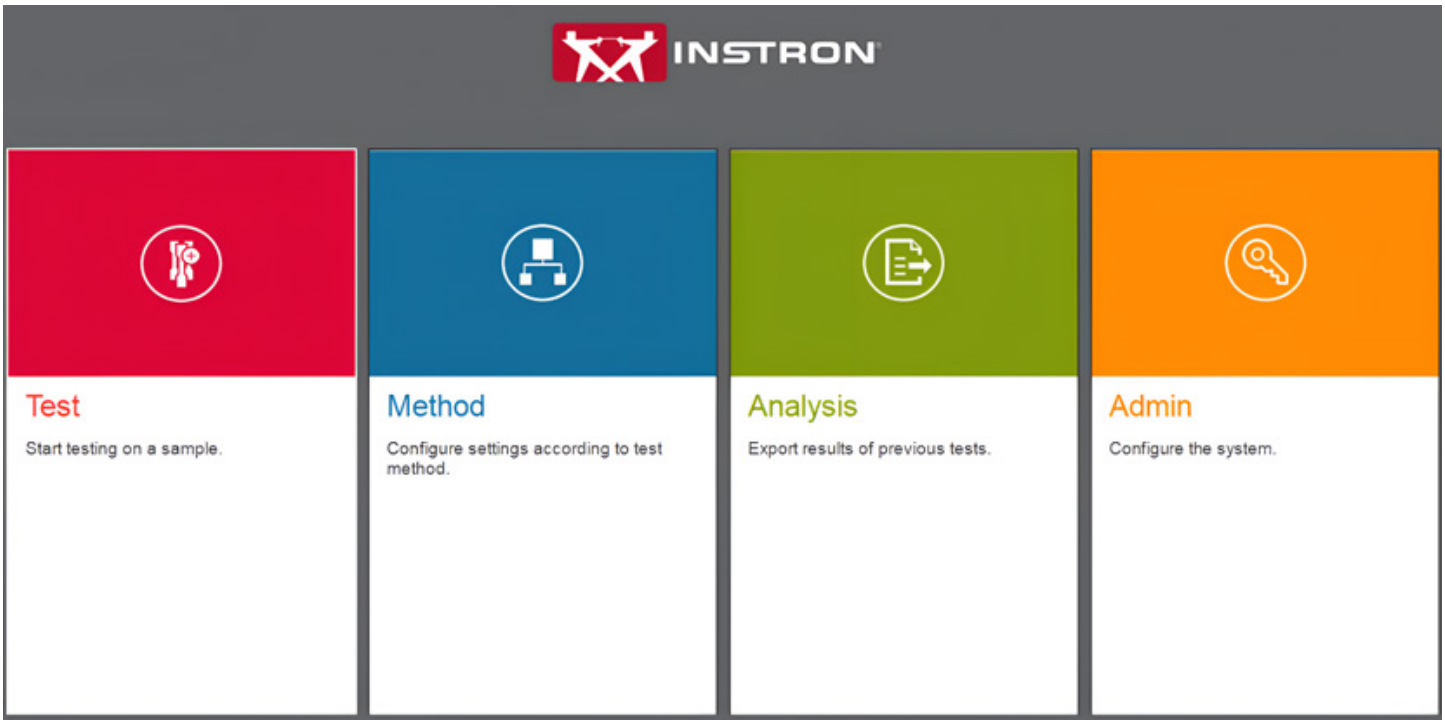
INSTRON®

The difference is measurable

TEST BUILDER APPLICATION SOFTWARE
AC-08-0013



Test Builder Application Software with its most intuitive workflows is designed to suit static, monotonic and user defined fatigue cycling testing. It is designed to help increase testing efficiency and minimize safety hazards. The home screen of the application software has been categorized into 4 major tabs namely the Test, Method, Analysis and the Admin tab to help user identify the relevant section to be accessed when in operation.

The test tab provides the live information of the ongoing test. The live displays are configurable that provide live information to the user about the current status of the test.

Multiple graphs can be displayed in the workspace with the flexibility to choose the parameter in both X and Y axis.

Additionally quick change over of graphical view from Stroke vs. Time to Load Vs. Time / Extensometer Vs. Time is possible at the click of a button distinctly added to the test layout. Distinct and easily accessible test control buttons to set pressure high or low based on the operation required, switch on or off the test data recording based on the need and start and stop the test from the test tab

1 Live displays 2 Workspace 3 Buttons for quick change of graphical parameters 4 Distinct control buttons

TEST BUILDER CAPABILITIES

The Test Builder application software helps to perform the following tests:

STATIC:
Single step static loading

CYCLING:
Single step cycle waveform

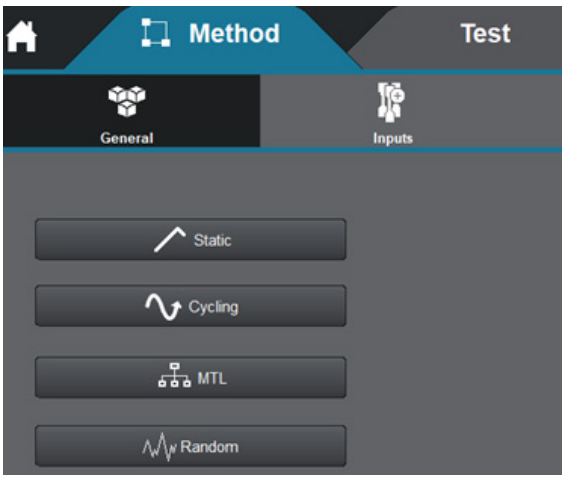
MTL:
Multi step waveform generation (ramp, cycle, dwell etc.)
Monitor change in signals to terminate step

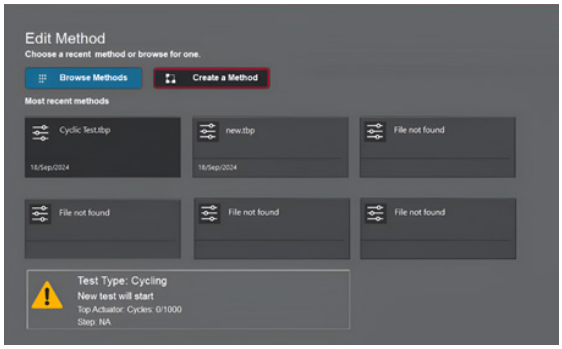
RANDOM:
Time history, turning points

SPECTRUM LOADING:
With a single spectrum loading, users can vary load levels, frequencies, and turning point patterns based on rainflow counting.

TEST RECOVERY AND RESUME OPTIONS:
On restarting an aborted test, users can choose to resume from the termination point or restart the aborted block, with previous settings as the session defaults.

You can choose the type of test that needs to be performed from the methods tab. Create your own method or edit an available method from the template available.



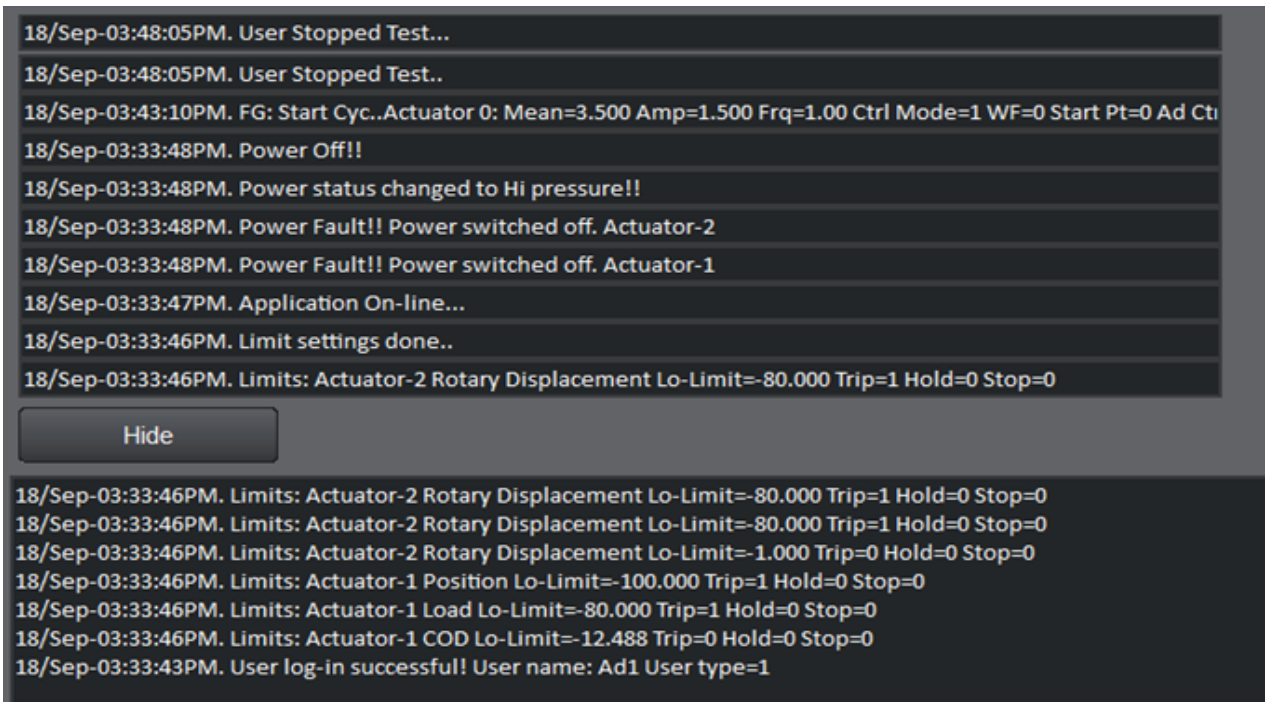


The methods tab has further sections relevant to specimen details, test parameters that need to be measured, data log parameters, test control parameters and limit setting panel that get highlighted when in that section. The simple icons and menus used prompt the user to key in the right parameters in the relevant sections.

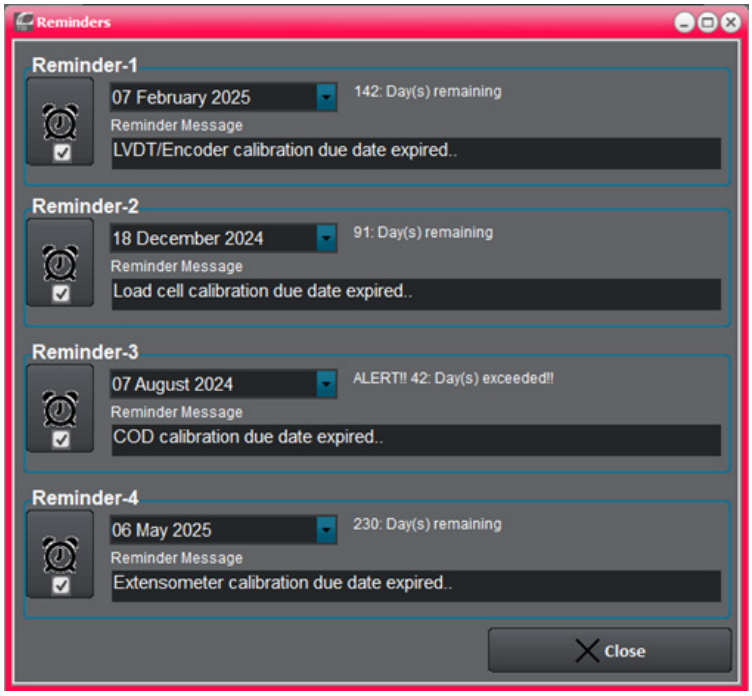
A TYPICAL CYCLIC TEST METHOD & RELEVANT SECTIONS

All systems at Instron are built considering safety achievable to the highest level. A dedicated section in the methods tab helps set up the upper and lower safety limits for stoke, load and strain channels to trip, hold or stop the test when in emergency or uncontrolled occurrence of any event.

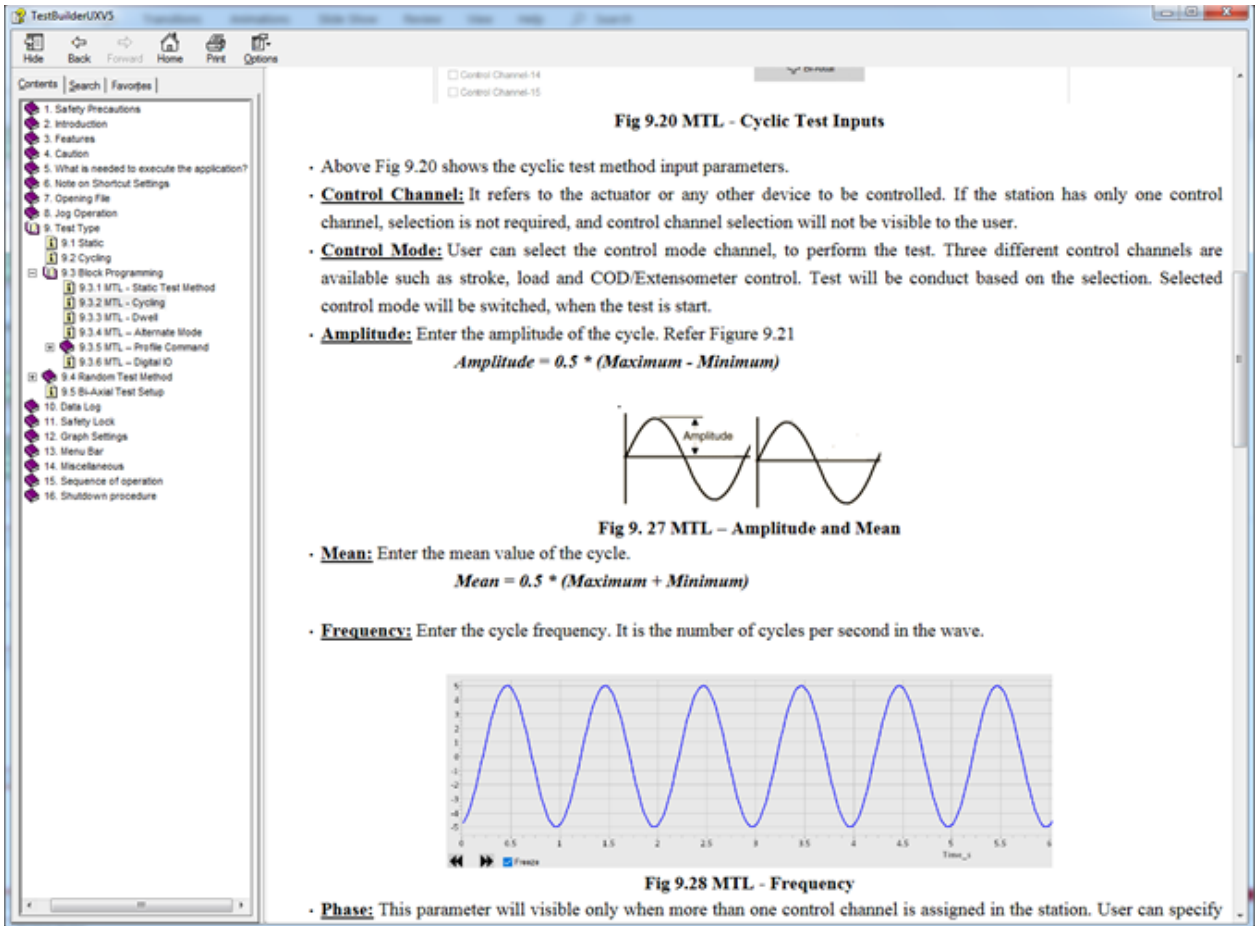
Any event occurrence or machine behavior can be logged into the relevant sections of the application software that helps in post analysis.



The application software has inbuilt functions for sending emails, SMS and provision to set reminders so that the user is never off track of the maintenance and calibration schedules.



The test builder application software also provides Structured HTML help to quickly access required information.



APPLICATIONS

UTM-High cycle fatigue, customized tests

Multi Channel: Axial-Torsion, Biaxial etc.

Works up to 128 Channels

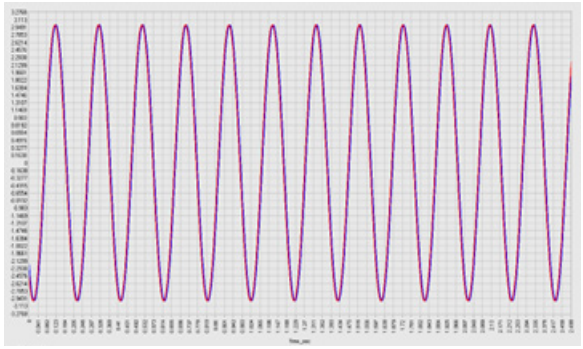
Multi-channel aircraft structural static and fatigue testing.

Low Force Systems

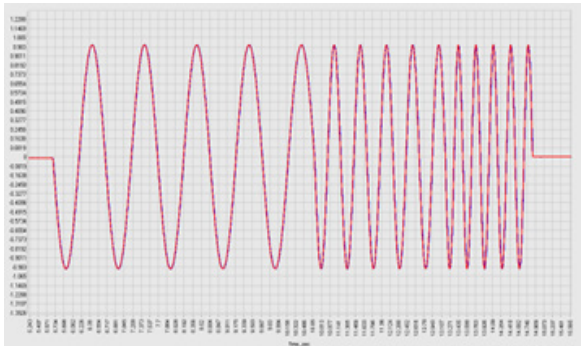
Metals, composites, plastics, structures, components, etc.

AN OVERVIEW OF TYPICAL WAVEFORMS GENERATED

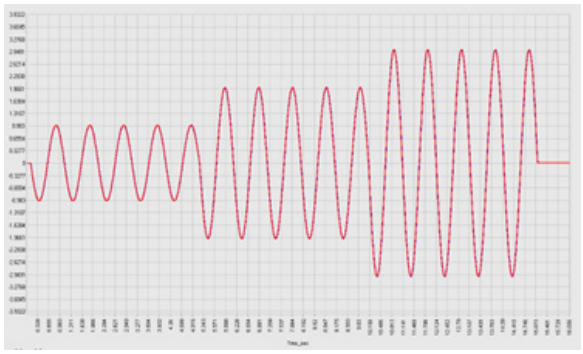
CYCLIC



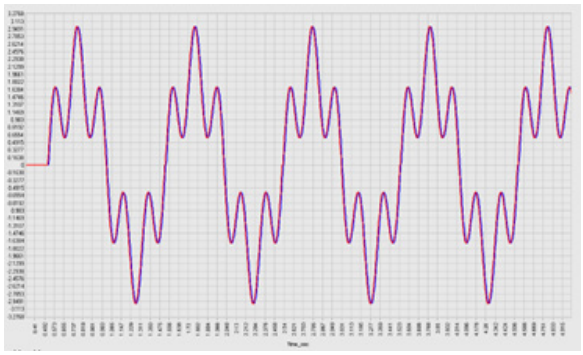
FREQUENCY SWEEP



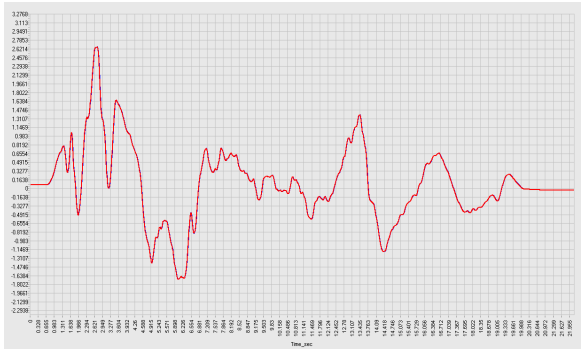
MULTI-STEP



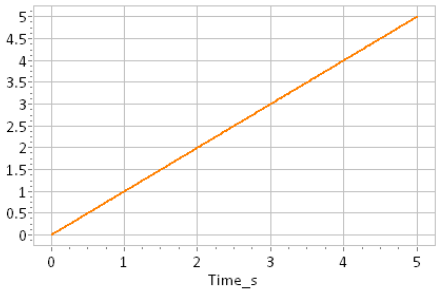
SINE-ON-SINE



SPECTRUM



STATIC



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