

# Tinius Olsen

## Horizon Software



# SIMPLY POWERFUL SOFTWARE FOR MATERIALS TESTING



Fig. 1. Introduction screen and launch page for Horizon.

Tinius Olsen is proud to introduce you to the next evolution of testing software with our Horizon package. As part of our development process, we have taken the best features of our existing software offerings, including Test Navigator, QMat, and EP600 software, added a host of report writing and data manipulation capabilities and in the process, created a new, unparalleled testing platform that will make easy work of your materials testing programs, whether they're designed for the demanding rigors of R&D or the charting and analysis functions of QC testing.

One of the first features you see within the Horizon software is its use of the most current Windows environments. These familiar formats make it easy to use and learn, especially since the same familiar functionality is maintained throughout the program.

Fig. 2. Typical live test screen showing machine controls and resultant graph.

## Key features of Horizon software include:

- Test Method Library
- Test Editor
- Tabbed Test and Recall Area
- Multiple Machine Control
- Output Editor
- Multilingual
- Method Editor
- Result Editor
- Multifaceted Security



# METHOD LIBRARY AND TEST EDITOR

If your testing regimen follows a quality control analysis to a variety of international standards, then going to the Test Method Library is, most likely, the first place you want to visit; here you can select your desired test method that we have written in accordance with different international test standards. So, for example, if you need to test for the melt flow index of incoming resin, to ASTM D1238 procedure B, simply select that routine from the list in the library. Similarly, if you need to determine the pipe crush strength in accordance with EN802, or the tensile strength of steel reinforcement bar in accordance with ASTM E8, or the Vicat softening temperature of plastics in accordance with ISO 306 etc., simply make the selection from the library, confirm machine and specimen parameters and start the tests – only four clicks of your mouse from start-up to testing!

If, on the other hand, you want to develop your own calculated result from a test, using a national standard as a template for your unique test, it is a simple task of adding the result (and calculation) to the output, and saving the test set-up with your unique name.

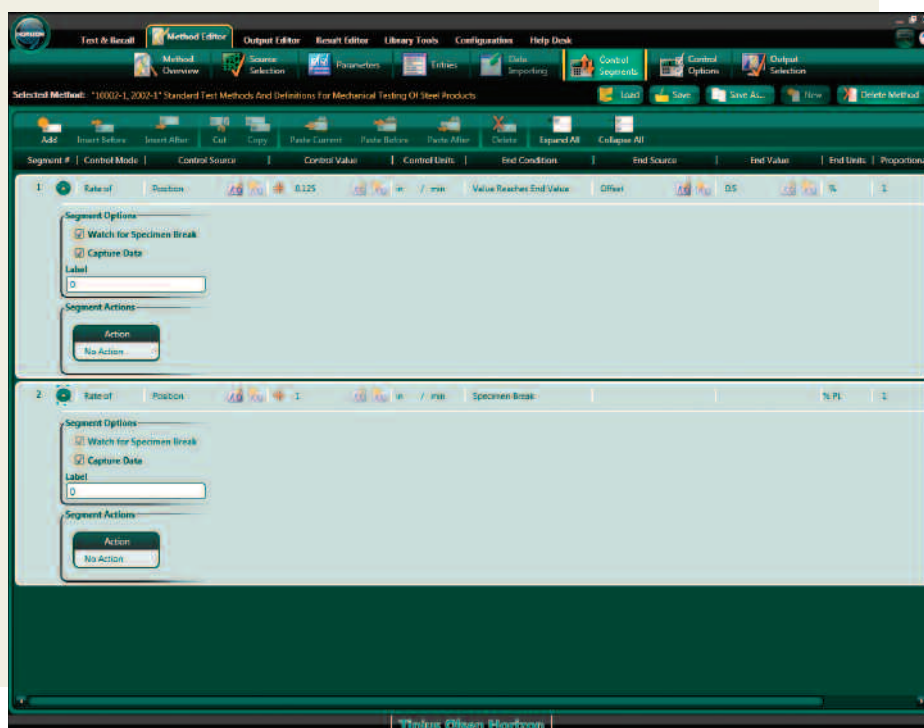
Alternatively, you can develop your own test method where you have complete control over how the test machine performs over the course of the test. You can program the control segments, control options, specimen parameters, the report output, and how the test machine and software communicate with each other.

**Fig. 3.** Library search result, looking for a standardized tensile test routine.

**Fig. 4.** Control Segments setup within the Method Editor section of Horizon software. The number of control segments available for each test, and test type, is unlimited, although experience indicates that typically no more than five are generally used.

## Notable features of Test Method Library and Test Editor

- Searchable database of international test standards
- Standards from ASTM, ISO, EN, BS DIN and many more
- Tests for tension, flexure, melt index, compression etc.
- Ability to customize the test setup using a standard as a template
- Setups are available in multiple languages and dialects
- Multiple levels and types of security so data and equipment is protected.



# TABBED TEST AND RECALL AREA

## Notable Features of Tabbed Test and Recall Area

- Examine test results from previous tests while performing live tests.
- Ability to test multiple machines and machine types.
- Multiple graph types can be used for each test.

The next feature you may notice is that Horizon can perform multiple tests at one time, controlling and gathering test data from multiple machines (provided your pc has the necessary hardware to control multiple machines). This is true whether you're controlling and gathering data from multiple melt indexers, hydraulic tensile testing machines; and/or electromechanical testing machines, (whether they're performing tensile, compression, flexural, tear, peel, or other tests).



**Fig. 5.** Test Screen showing the tab labeled for multiple MP600 Melt Indexers. The software is ready to start the tests on multiple MP600 while at the same time controlling the tests being performed on the first tab, which in this example, is an H5kT tensile tester.

**Fig. 6.** How the machines within each tab are setup to communicate with Horizon software.



# RESULT EDITOR AND OUTPUT EDITOR

Up to three different graphs can be produced per test, using different measurement axes.

Once all the data has been gathered, Horizon can consolidate it into reports that you can customize to your, or your customer's, individual needs. The output editor allows unprecedented formatting of your data. You can select what live data can be shown during the test; the acceptable limits of the results; the graphical representation of the test – in multiple formats; the layout of the report including the use of your, or your customer's, logo on the report; and also if you need the resultant data available in another format, it can be readily exported or converted to that desired format.

These reports can be distributed across one pc, multiple pcs, or even across a network; the presentation of these test reports are compatible with multiple common formats, including an ERP format.

## Notable Features of Result Editor and Output Editor

- Multiple graph types can be used per test
- Reports can be generated using your customer's logo
- Reports can be created in the precise format you desire.
- Data can be exported to a variety of different formats.
- An overview is always available to preview what has been created.

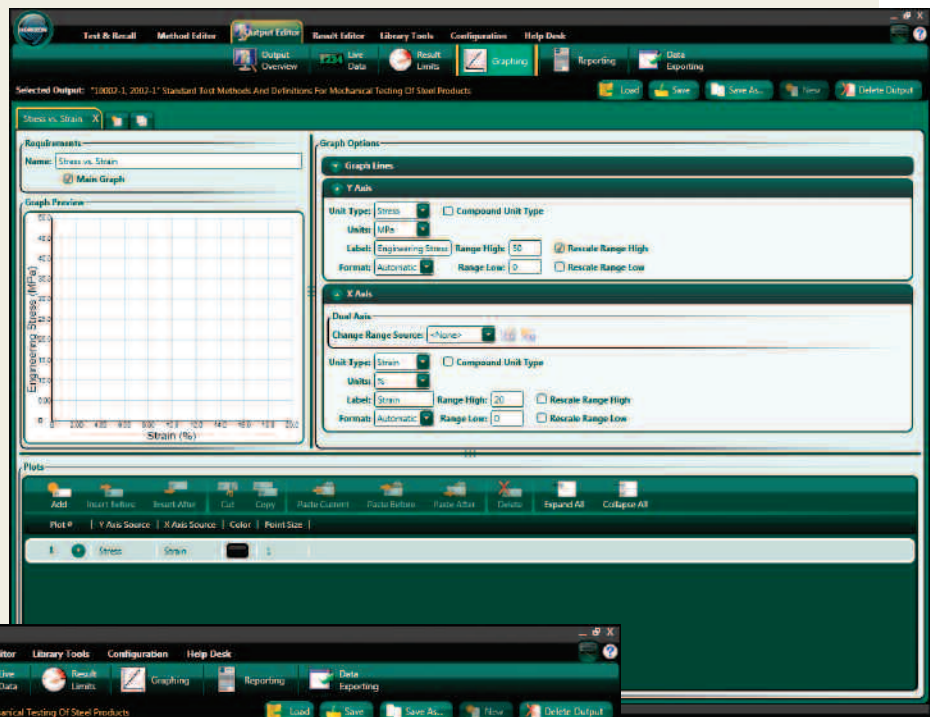


Fig. 7. Graph setup in the Output Editor function of Horizon software.

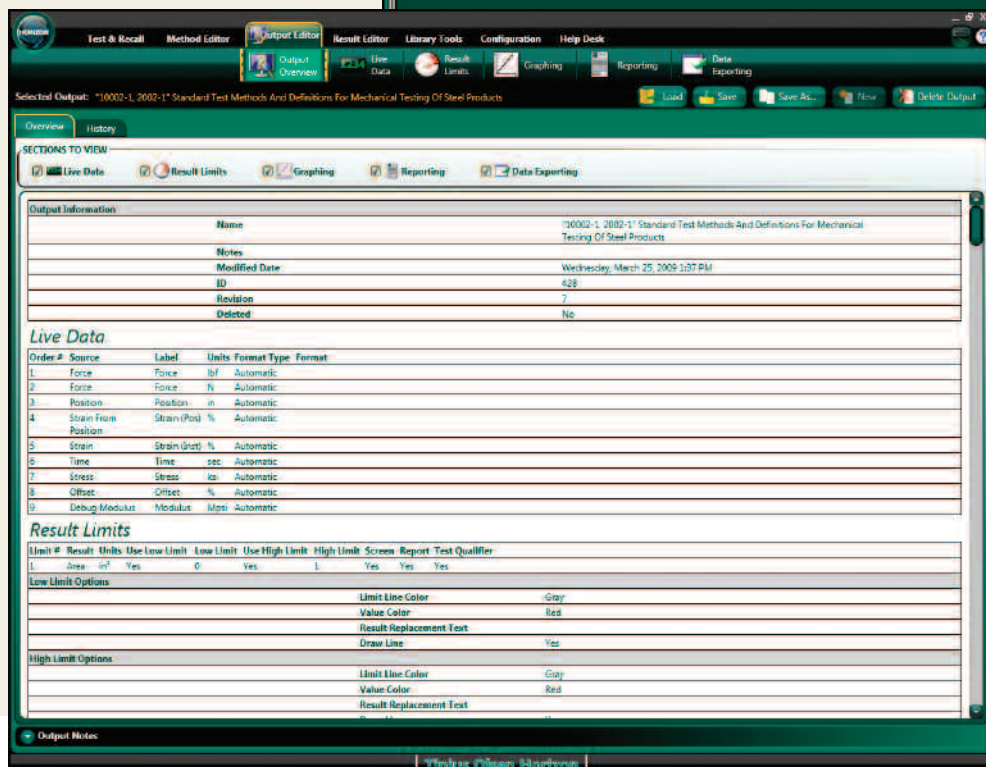
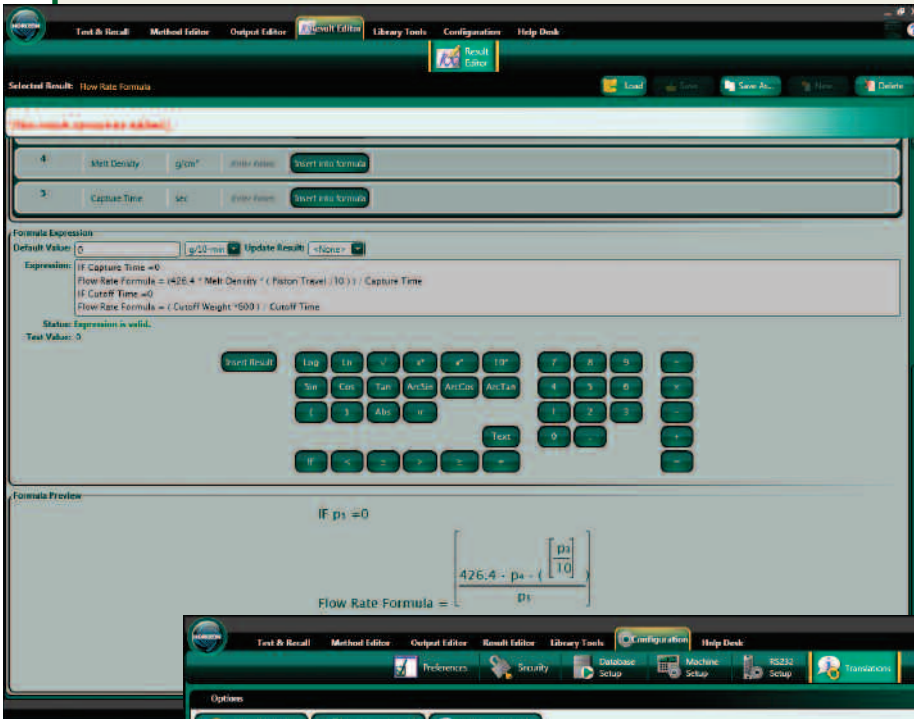
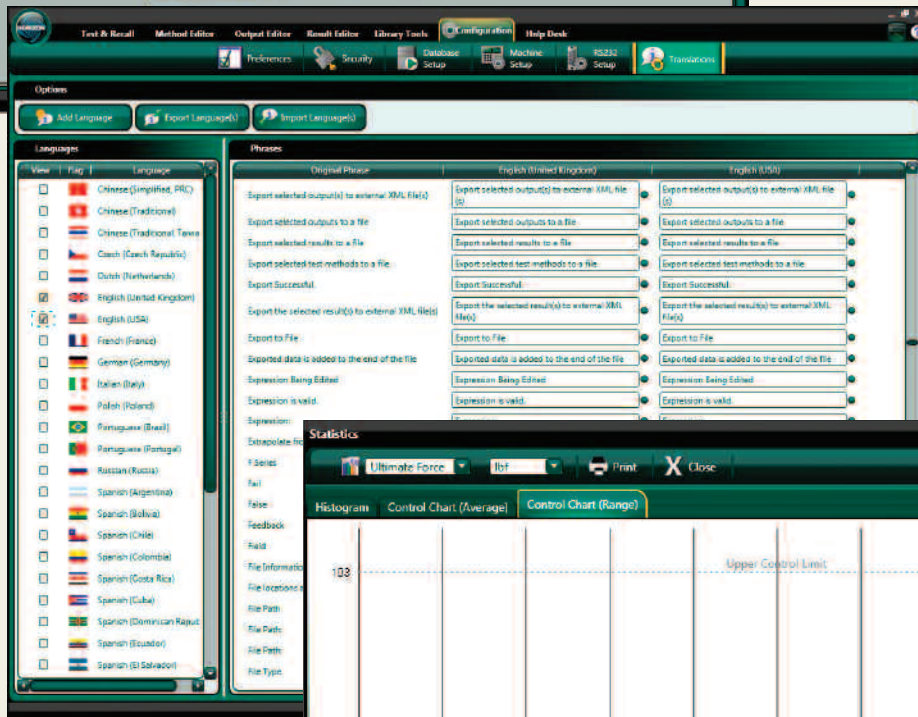


Fig 8. At every stage of the test set-up, an overview of what has been instructed and how data is to be recorded, used, saved, and output can be seen and checked.

# RESULT EDITOR

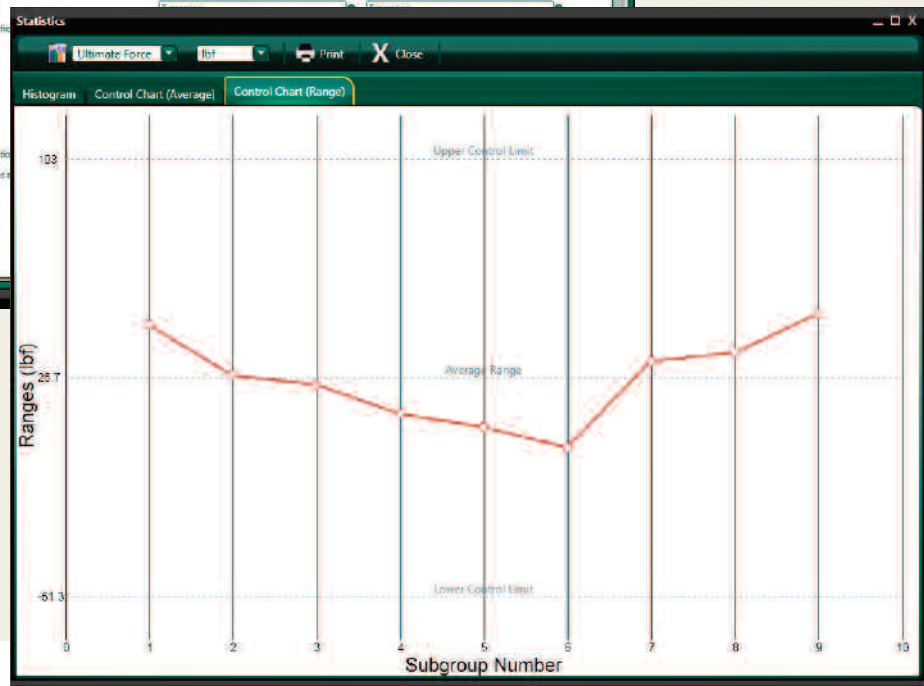


**Fig. 9.** Customized formulae can be written to create your own unique results. In this particular example, the result calculation is a “standard” result and consequently uneditable and greyed out.



**Fig. 10.** To make Horizon truly universal, the software has a Translations section where phrases used as titles and commands can be translated into local dialects and languages.

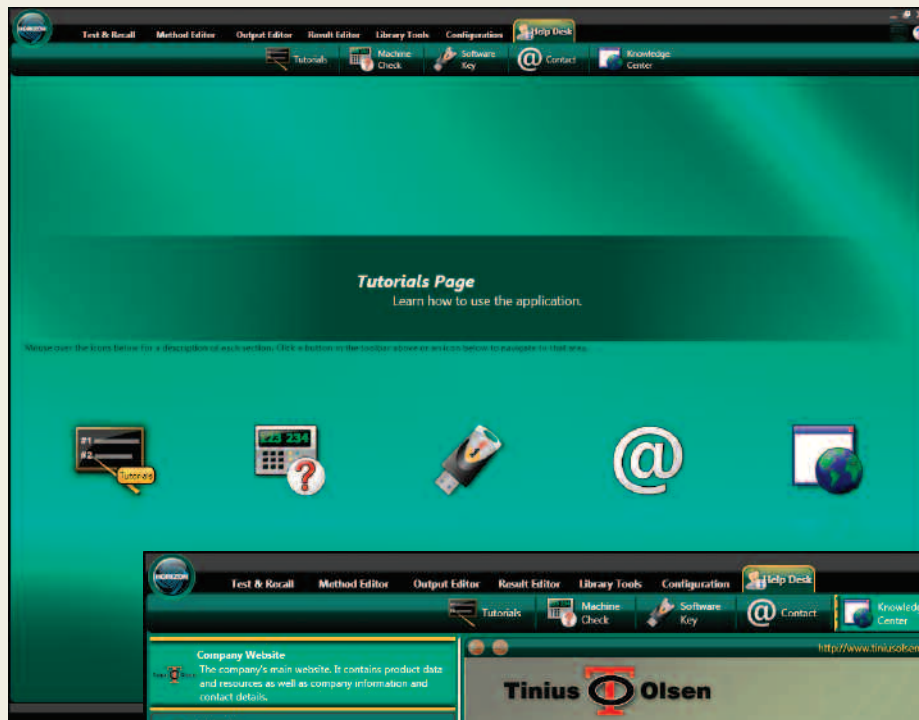
**Fig. 11.** Statistical options on selected results.



# HELP DESK AND SUPPORT

Horizon is one of the most technologically advanced testing software suites, but throughout the design process two key criteria of value and simplicity were maintained. If at any

time you have questions on the operation of the software or how to make different reports, the program has built-in tutorials, on-line help, and Tinius Olsen Help Desk access.



**Fig. 12.** Help Desk launch page. Here you can see the access to the on-disk / on-line tutorials, details of the program key, and emailable access to our manned Help Desk.



**Fig 13.** As an additional resource, you can also link directly to our application-based microsites which feature an Ask-The-Expert forum where users can ask questions of our market and application technologists.

# COMPUTER REQUIREMENTS

## Minimum Hardware Requirements

- 2 GHz Pentium IV or equivalent
- 1 GB RAM, although using multiple testing machines may require additional memory and/or a faster processor
- DirectX 9.0 capable video card
- 40 GB HD Drive
- CD-ROM Drive
- Mouse or pointing device and keyboard supported by Windows
- Monitor that supports at least 1024 x 768 resolution and 32-bit color
- 1 serial port per testing machine or 1 USB Serial Port adapter per machine
- 1 USB Port for the software key
- Windows compatible printer recommended for reporting capabilities

## Recommended Hardware Requirements

- 2 GHz Pentium Dual Core or equivalent
- 2 GB RAM, although using multiple testing machines may require additional memory and/or a faster processor
- 256 MB DirectX 9.0 capable video card
- 40 GB HD Drive
- CD-ROM Drive
- Mouse or pointing device and keyboard supported by Windows

- Monitor that supports at least 1024 x 768 resolution and 32-bit color
- 1 serial port per testing machine or 1 USB Serial Port adapter per machine
- 1 USB Port for the software key
- Windows compatible printer recommended for reporting capabilities
- Windows compatible sound card and speakers (for audio playback)
- Additional USB ports for measuring devices, barcode scanners, etc.
- At least 1 integrated serial port (not USB) where possible
- An active Internet connection

## Software Requirements

- Tinius Olsen's Horizon Software is designed for 32-bit operating systems running Windows XP with Service Pack 2 or higher or Windows Vista. Tinius Olsen does NOT support Windows XP with Service Pack 1 or less, Windows 2000, NT, 98, ME, 95, or 3.1 systems. Although the software may install or partially run on these operating systems, we do NOT recommend doing so and will not support any issues caused by doing so.
- Internet Explorer 6 at a minimum but Internet Explorer 7 is recommended.

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