

# NexygenPlus 4.1

## Data Analysis & Materials Testing Software

# Product Description

**N**exygenPlus 4.1 multi-lingual materials testing software is the hub of the Lloyd Instruments materials testing system. This extraordinarily easy to use and flexible software, allows the operator to control and monitor all aspects of the system from a single front end. It provides fast, reliable, and powerful testing and data analysis for tensile, compression, tear, peel, friction, food, creep, relaxation, and flexural test applications. *NexygenPlus 4.1* is designed for use with Windows®10.

Getting started with *NexygenPlus 4.1* materials testing software could not be simpler, thanks to the extensive built-in library of test methods, all in adherence to AACC, ASTM, DIN, EN, ISO and other international standards. You can also choose to create custom multi-stage tests for more complex or unique test demands.

A powerful security and audit trail module provides 100% traceability and the software provides full automation capacity for automatic testing.



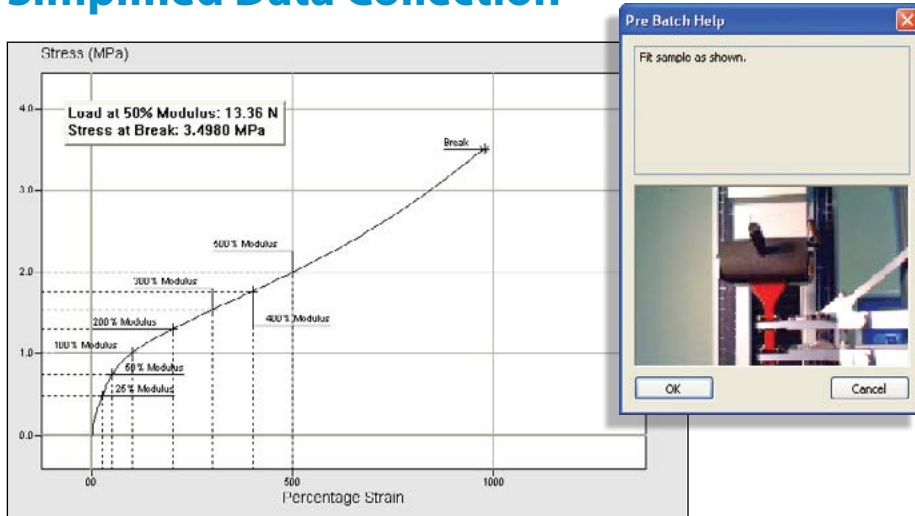
## Key Features

- ▶ **Large, Built-in Library**  
Test methods meeting international standards such as ASTM, DIN, EN and ISO.
- ▶ **Video Capture System**  
Allows playback of synchronized video and graph. Ideal for post-test analysis of product and component testing.
- ▶ **Data Integrity**  
Optional SQL database driven audit trail logs critical changes and allows Active Directory domain user management.
- ▶ **Comprehensive Multi-Stage Test Wizard**
- ▶ **New Enhanced Graphical User Interface**
- ▶ **Export Data**  
Microsoft® Office, SPC or LIMS packages. Reports may be printed and/or emailed.
- ▶ **Workflow Builder**



# Functionality

## Simplified Data Collection



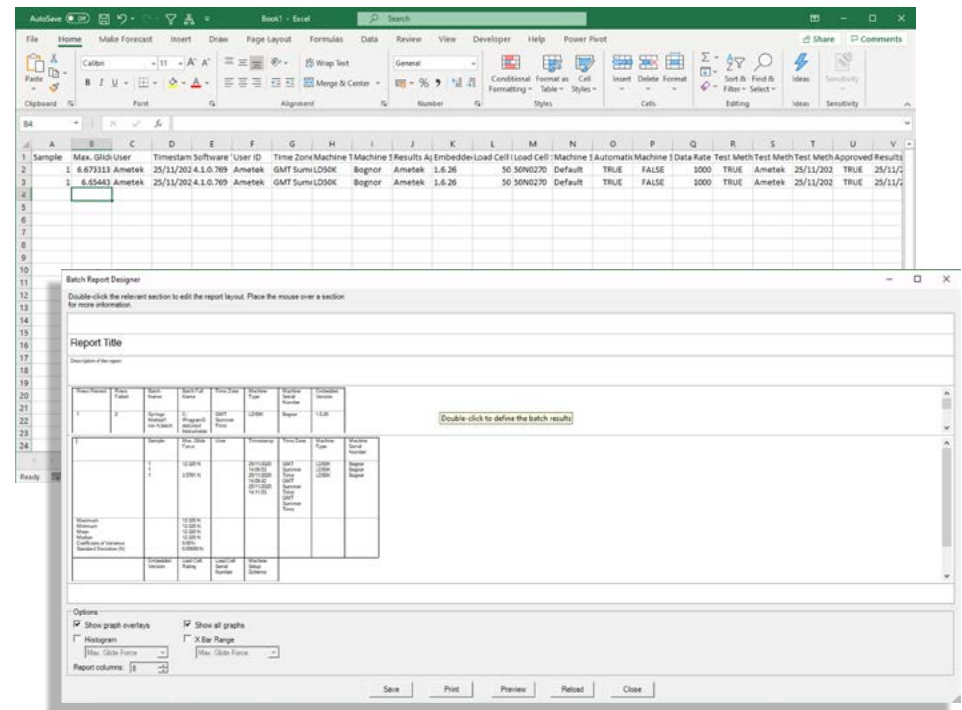
NexygenPlus 4.1 is configured to allow rapid and accurate data collection with many built-in functions to ensure free testing.

- Supports direct reading of Mitutoyo digital micrometers and callipers for sample measurement.
- Customizable user instructions can include digital pictures of fixtures and sample set-up.
- Clear pass/fail indications given to the operator.
- Supervisors can program part numbers into the system to avoid data entry errors by operators.
- Graphs display relevant points selected by the user.

## Powerful Analysis and Reporting Tools

Production variation can be costly, creating both scrap material and consequential losses due to poor quality. By monitoring a process statistically, it is possible to detect process variation before the customer receives the product. Statistical process control (SPC) avoids losses by detecting when a process is going out of control. With NexygenPlus 4, the user has added benefits:

- Continuous monitoring of SPC data and user alerts if the process may be losing control.
- For users of standard SPC packages, a wide range of export capabilities that are compatible with most commercial packages. These include Excel®, TXT, ASCII and many more.
- Graphs can be overlaid in multiple colors with a legend shown directly on the graph.
- Built-in export utilities assist direct connection to LIMS systems.
- Takes full advantage of the power and flexibility of Microsoft Word for reporting. Reports may be directly printed to pdf and/or emailed.
- Data can be automatically transferred to specified Microsoft Excel® worksheets without operator intervention.



## Multi-Lingual

NexygenPlus 4.1 software is available in the following languages: English, Spanish, French, German, Italian, Danish, Turkish, Chinese, Russian, and Polish.

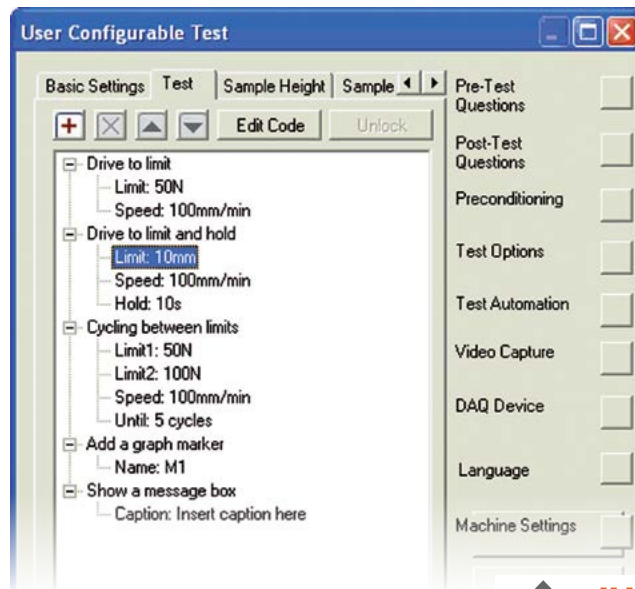
## Test Creation

Getting started with NexygenPlus 4.1 is simple, thanks to:

- An extensive built-in library of test methods covering ASTM, DIN, EN, ISO, and other standards.
- Test wizards for tension, compression, tearing, peeling, friction, and flexural tests.
- The User Configurable Test facility, ideal for product and component testing, R&D use and specialized testing

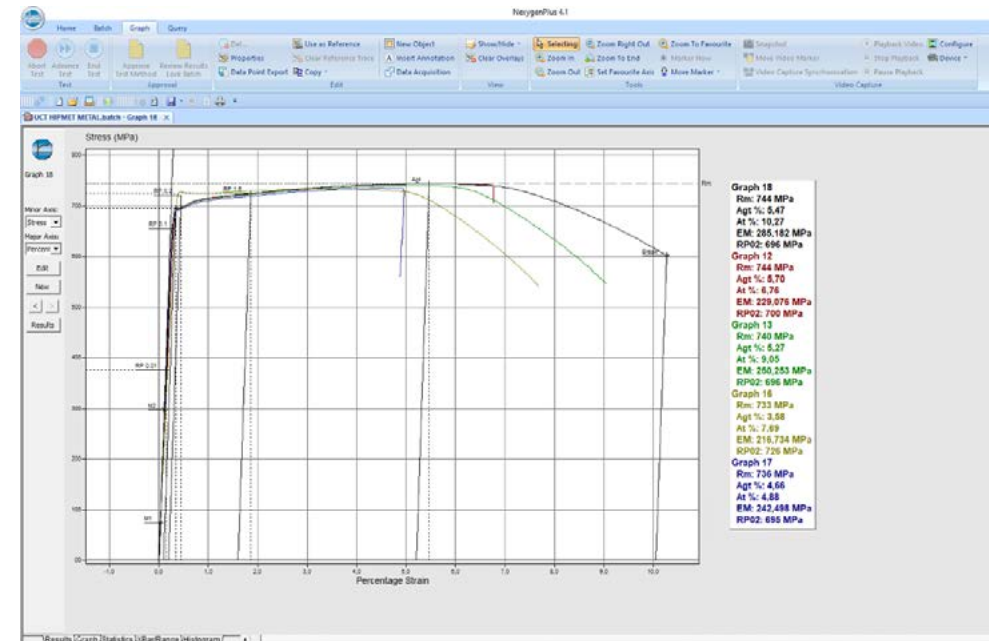
## New User Configurable Test

The new User Configurable Test enables users to quickly build advanced multi-stage test routines using simple built-in commands.



## Video and Still Picture Capture

Whether for advanced sample failure analysis or presentation of test results, video and stills capture is a feature unique to NexygenPlus 4.1. Video and/or still pictures are synchronized with the stress/strain data and can be replayed or shown at specific points during the test in the graphical display. To utilize these powerful features simply connect your webcam or analog video camera to your PC.



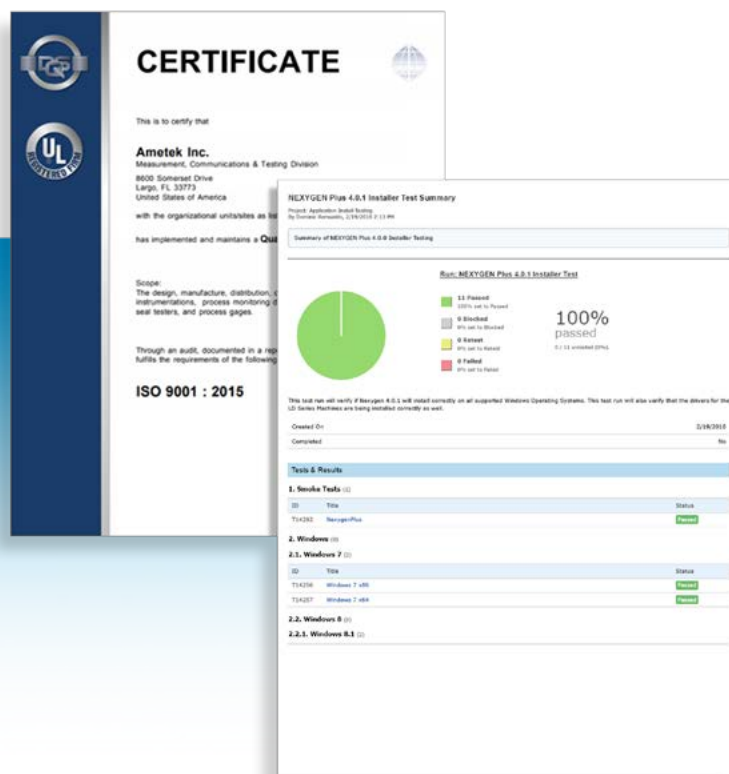
## Data Integrity

### Validation support services provided by Ametek Lloyd Instruments

- Partnership in evaluating the 3 controls required for compliance including supplier assessments.
- IQ/OQ services.
- Software result calculation verification.
- ISO17025 calibration.
- Maintenance and technical application support.
- Software release bulletins.

### Key NexygenPlus Technical Controls include

- AD login.
- User groups with configurable permissions.
- SQL audit trail.
- Logging of changes including values before and after with reasons and electronic signature.
- Electronic signature approval for test methods, test results, reports.
- Simple restore from backup.
- Secure pdf integration (PFX).



## Workflow Builder

NexygenPlus 4.1 facilitates both software and hardware automation. In a quality control environment where time and accuracy is of the essence, it is essential to ensure that routine testing can be carried out with the minimum of input from the operator.

NexygenPlus 4.1 can be configured to automate tasks such as:

- Automatic reading of sample dimensions.
- Automatic exporting data to Excel following a batch of tests avoiding the need to copy and paste.
- Limiting an operator's access rights.
- Requiring the operator to perform a set number of tests.
- For routine testing, the user interface can be configured to show only items that are relevant to the operator.

## External Automation

An unused COM Port (or a USB/COM Port adaptor) can be used to create a simple automation system.

**USA, Florida**  
Tel +1 (800) 527 9999  
[test.sales@ametek.com](mailto:test.sales@ametek.com)

**India**  
Tel +91 22 2836 4750  
[test.sales@ametek.com](mailto:test.sales@ametek.com)

**Singapore**  
Tel +65 6484 2388  
[test.sales@ametek.com](mailto:test.sales@ametek.com)

**China, Shanghai**  
Tel +86 21 5886 5111  
[test.sales@ametek.com](mailto:test.sales@ametek.com)

**China, Beijing**  
Tel +86 21 8526 2111-19  
[test.sales@ametek.com](mailto:test.sales@ametek.com)

**United Kingdom**  
Tel +44 (0) 1243 833 370  
[test.sales@ametek.com](mailto:test.sales@ametek.com)

**France**  
Tel +33 (0) 30 68 89 40  
[general.lloyd-instruments@ametek.fr](mailto:general.lloyd-instruments@ametek.fr)

**Germany**  
Tel +49 (0) 2159 9136 510  
[info.mct-de@ametek.de](mailto:info.mct-de@ametek.de)

**Denmark**  
Tel +45 4816 8000  
[test.sales@ametek.com](mailto:test.sales@ametek.com)

## Ordering Information

NexygenPlus 4.1 Standard .....	<b>40-NEX41</b>
Nexygen Plus 4.1 with Advanced Security Module.....	<b>40-NEX41SEC</b>
Reviewer license — Nexygen 4.1 (No machine control) .....	<b>40-NEX41VWR</b>
Reviewer license — Nexygen Plus 4.1 with Advanced Security Module..... (No machine control)	<b>40-NEX41SECVWR</b>
Additional license — NexygenPlus 4.1 Standard valid at a single site .....	<b>40-NEX41-SEAT</b>
Additional license — NexygenPlus 4.1 with Advanced security Module .....	<b>40-NEX41SEC-SEAT</b> valid at a single site
Upgrade to NexygenPlus 4.1 Standard from earlier version of NexygenPlus.....	<b>40-NEX41-UPG</b>
Upgrade to NexygenPlus 4.1 with Advanced Security Module..... from earlier version of NexygenPlus	<b>40-NEX41SEC-UPG</b>
Advanced Security Module for an existing licensed version. ....	<b>40-NEX41SEC-ADD</b> of NexygenPlus 4.1 standard



For detailed specifications  
go to the Data Sheet at [ametektest.com](http://ametektest.com)

**LLOYD** **K**  
materials testing

No part of this document may be reproduced or modified in any form or by any means, electronic or mechanical, without express written permission from AMETEK STC.