GENTEST – ADVANCED UTM TESTING SOFTWARE

Description

GenTest is NextGen's data acquisition and test control software for universal testing machines, developed as the standard software environment for UTMs. It is built around a method-driven workflow: the test method defines the control steps, the live channels and curves, the calculation rules, and the report output. This keeps setup parameters, operator inputs, recorded data, calculated results, and reporting tied to the same test record.

GenTest is used in QA/QC and laboratory environments where repeatability, traceability, and consistent documentation matter. It supports real-time monitoring during the run, built-in calculation of common mechanical properties, flexible unit systems, and export-ready reporting.

Supported Test Types

GenTest supports the core UTM workflows used in routine and standards-based testing:

- Tensile testing
- Compression testing
- Bending / flexure testing
- Shear testing

Depending on your configuration and accessories, the method library may also include application-specific groups (for example peel-style workflows shown in the method group structure).

Typical Applications

GenTest is intended for daily testing programs where the lab needs controlled execution and repeatable reporting:

- Incoming inspection and batch verification
- Routine QC across shifts and lots
- Supplier qualification and material comparisons
- R&D comparisons, process changes, and heat treatment checks
- Metals, polymers, composites, construction materials, and biomedical product testing environments

Key Features of the GenTest Software

GenTest includes a practical set of features that support the full testing workflow for the test types it runs. The main benefits come from:

- **Method-Driven Workflow**: Tests run from defined methods, keeping setup parameters, recorded data, calculations, and report output tied to the same test record.

- **Templates And Standards-Based Methods**: Create methods from normal or expert templates, or start from example methods aligned with common standards-based workflows.

- **Step-Based Test Control**: Build methods as multi-step sequences (Step 1–Step 4) with configurable control logic and changeover conditions for consistent execution.

- **Real-Time Curves And Monitoring**: Monitor tests during the run using common views such as stress–strain, displacement–load, load–time, and strain–time.

- **Built-In Calculations**: Calculate key mechanical results such as UTS, yield strength (ReL/ReH/Rp), elongation, and modulus of elasticity (when configured by the method).

- **Flexible Units And Formulas**: Work in N, kN, kgf, lbf, MPa and apply formula-based expressions for method-specific conversions and outputs.

- **Report Templates And Export**: Generate standardized reports with tables and graphs, with export options that fit Word/Excel documentation workflows and raw data review.

- **Demo Mode And Simulation Files**: Train operators and validate methods using simulated runs without connecting to the testing machine.

- **User Management And Permissions**: Create users, assign roles, and control access to method editing and test operation for QA/QC environments.

Support, Quotes, And Technical Help

If you need help choosing the right GenTest configuration or would like to try the software on your NextGen UTM, our team can help. Contact us or request an online quote for installation guidance, licensing questions, compatibility confirmation for your machine, or any technical support if you already own GenTest, and we'll respond with clear next steps and make sure you can get up and running quickly.

Request a formal quotation or send an e-mail to sales@nextgentest.com for the most up-to-date pricing and applicable discounts and incentives.
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