

ONDIO™

Application Builder Software

For Customizing NEXYGEN FM and NEXYGEN MT Application Software

NEXYGEN software packages have been engineered to offer solutions for the most common force measurement and materials analysis applications. However, when you need to perform custom testing or if you simply want to modify your NEXYGEN test setup to perform additional functions not part of the standard setup, we offer the ONDIO application builder software. ONDIO software is based upon the VBScript programming language. ONDIO software presents detailed attributes for your standard NEXYGEN FM or MT package. It presents configurable parameters in three steps: Test Parameters, Primary Script and Secondary Script:

Step 1 – Establishing Your Test Parameters

ONDIO software interfaces with your NEXYGEN test setup and provides additional attributes that can be used for your test. These attributes include:

- Direction (tension or compression)
- Preload
- Auto Measure Sample Height
- Known Height
- Area
- Break
- Break Not Expected
- Break When Load Drops Sharply
- Auto Zero
- Auto Return
- Extra Results

These attributes help to further define your NEXYGEN setup with very specific test parameters.

Step 2 – Define How Your Machine Operates at Startup and at the End of the Test

The primary script is used to define how your NEXYGEN application will operate at the start and the end of the test. It determines how the machine moves when readings are taken and what results are pre-sented.

The advantage of using VBScript is that the language is intuitive and easy to learn. The STAGE command helps define how the machine will move and can be established based on extension or load. ONDIO software recognizes parameters in [brackets] and the units associated with the parameter. If the parameter is incorrect, ONDIO software will identify the problem in your script to help in troubleshooting.

The RESULT command identifies the column heading to be used as the values for the specified result type. Results can be recorded based on the load limits or extension you establish or can be determined by calculations or combination of results such as the sample modulus.



(a) Ondio Test Parameters



(b) Ondio Primary Script

SPECIFICATION
SS-MT-1604-1101
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www.ametek.com
www.lloyd-instruments.co.uk
www.chatillon.com
www.chatillon-scales.com
www.davenport-instruments.co.uk

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Ordering Information

Order No.	Description
40/0683	ONDIO Application Software, Single License
40/0683/5	ONDIO Application Software, Five Seat License
40/0683/10	ONDIO Application Software, Ten Seat License

Loop counters for cycling testing can be created, stage limits and "Progress" routines established to determine how far your long test is in completing the entire test setup. In addition preconditions can be created to prompt the user to take manual action prior to the test being allowed to commence. It is even possible to compensate for typical testing factors, such as a pause by the machine during a relaxation measurement.

Step 3 – What To Do With Your Results

Secondary scripting defines how your results will be used. The secondary script can be used to post "markers" at specific points on the trace to denote key characteristics. Markers can be de-fines based on load, extension, work and time. The secondary script includes a built in Modulus which can be used to determine the steepest gradient and draw a tangential line along the trace. Secondary script can be used to prompt a NEXYGEN test to react at the break point of a sample. For example, it is possible to specify to record the "LoadAtBreak", "ExtnAtBreak" and the "WorkAtBreak".

ONDIO software can also be used to expand the data acquisition functionality of a NEXYGEN application. ONDIO software can operate with an interface card for reading analogue or digital signals.

This allows users to:

- Continuously collect analogue data from an input channel
- Terminate a drive stage with either an analogue or digital signal falls below a user-de-fined threshold
- Automatically convert the input voltage to the required unit (e.g. extensometer output converted to extension)
- Change the state of a digital output (switch equipment On/Off)

Features

- Expands NEXYGEN FM and NEXYGEN MT application packages
- Simple and intuitive using VBScripting language
- English Language Syntax
- Automatic Syntax checking
- Advanced Results Calculations
- Preconditions
- Automatic Scaling of Results
- Doesn't Require Previous Programming Experience
- Ideal for complex testing involving:
 - Multiple stage testing
 - Cycle testing
 - Tests involving load rate and load hold stages
 - User-defined results calculations
- Iso 9001TickIT Certified

System Requirements (Minimum)

- Pentium 2[®] Processor, 400MHz
- 128MB RAM
- 250MB Hard Disk Space
- 1 Free COM Port, with 16550 UART
- CD ROM Drive (For Installation)
- Monitor, with resolution 1204 x 768 or higher

AMETEK
TEST AND CALIBRATION INSTRUMENTS

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