The VantageNX is a revamped design for the EJA Vantage Family of universal testing machines. The sleek style will keep your lab looking sharp and allow for dynamic testing to meet most industry standards. Efficient placement of internal electronics improves ergonomics while maintaining a small footprint.

Thwing–Albert offers a wide range of grips, fixtures and accessories to outfit your universal materials tensile tester. These options enable the VantageNX to meet many industry standards including ASTM, TAPPI, ISO, DIN and others.

Features
- Ergonomic Frame
- 1 kN, 2 kN, 5kN VantageNX
- Small Footprint 16" x 17"
- 5kN Vantage= Duo
- Dual Column 23" x 19" Footprint
- 24-48" Travel
- Automatic Electronic Calibration
- One-Touch Auto Zero
- Electronic Air Switches
- Serial Load Cell Interface
- Powered by Your Choice: MAP-4 Windows Based Software with adjustable Keypad (or) Touch Screen Tablet for Simplified Test Control
- Full Line of Grips and Fixtures Available: Pneumatic, Vise, Wedge, Compression, Peel, COF, Burst, Puncture, Bending, Extensometers, and more.
- Tensile, Peel, Compression, COF, Cycling, Tear, Burst, ZDT, Flex/Bend, Stress Relaxation, Thickness, Insertion/Extraction, and more.

Touch screen controller option
You choose the option to control the VantageNX using a touch screen tablet that is connected to a built-in Bluetooth system. Run basic test functions with the touch of your fingertips.
- Designed for quick and easy testing
- NO PC needed to run tests
- Export test results for reporting
- Minimal operator training required
- Two screen size options: 7" or 10"
- Ready to test:
  - Tensile, Peel, Compression, COF
  - Easily modify test parameters
  - Automatic load cell recognition
  - Bluetooth communication
  - Network printer support
Grips and Fixtures

A wide range of grips and fixtures enable the Vantage™ to be configured to most International Standards including ASTM, TAPPI, ISO & DIN. Manual & air-operated grips, compression plates, peel fixtures, coefficient of friction, burst, extensometer and puncture fixtures provide endless test possibilities.

**Pneumatic Grips** are ideal for testing sheet materials including films, tapes, paper, textiles, nonwovens and tissue. There are a wide range of capacities available. Pneumatic operation makes sample insertion faster and easier than manual grips and ensures a contact uniform pressure.

**Mechanical Vise Grips** are designed for low, medium and high capacity applications. The vise grips are ideal for general tensile strength testing of paper, plastics, foils, textiles and other sheet materials.

**Wedge Action Vice Grips** are ideal for tensile strength testing of rigid plastics and composites of flat or round samples. The jaw faces are spring loaded for effortless opening and closing of the grip.

**Drum/Rubber Grips** are uniquely designed to securely hold flat samples of rubber, plastics and general polymers.

**Yarn, Rope, Wire & Cord Grips** are specifically designed for testing thin, flexible materials. They ensure a secure hold to maximize test result accuracy and repeatability.

**Pincer Grips** are ideal for small forces, pull off tests, tear test of components, adhesive bonds, plastic weldings (paper, plastics, rubber) etc. Chain mounting available for flexible positioning.

**Film Puncture** ASTM D4833  **Puncture** ASTM D6241  **Puncture** ASTM D751  **Tissue Burst** TAPPI T570  **Ball Burst** ASTM D6797  **Compression Platens**

**Film Blocking Fixture** ASTM D3354  **Coefficient of Friction**  **Finch Wet Strength Device**  **180° Peel**  **90° Peel**  **Z-Directional Test**  **3 Point Bend Fixture**

Thwing-Albert has designed many fixtures for custom applications and we would be glad to create one for you. Our grips are ideal for the Vantage™ but can be adapted to fit most universal materials testing machines.
Map-4 Material Testing Software

**Software Control.**
The Vantage™ is controlled via a serial interface connection between the tester and any standard PC or laptop. A magnetic test control keypad also provides convenient access to basic test functions.

**MAP-4™ Software**
This software equips the Vantage™ with Windows® 7, 8 and 10 operating system compatibility. It incorporates powerful capabilities for defining complex motion control and enables unlimited test methods.

**Features**
- View real-time graphical test results
- Multiple graphs
- Multiple database capabilities to organize results
- Audit tracking database
- User customizable test methods
- Create custom presentation templates
- Control your test result display
- Simplify analysis by tracking variables
- Group statistics for powerful analysis
- Easy unit conversion built-in
- Multi-lingual system capabilities
- Includes a built-in library of testing methods to comply with ASTM, ISO, TAPPI, DIN and other standards.
- Simple customization when your test parameters change, open existing methods, modify and save.
- Advanced users can have full control over the motion analysis and the presentation of data.

**System requirements**
- Operating System:
  - Windows® 7, 8, or 10
- Microsoft .NET Framework 4.5
- Processor:
  - 2GHz or faster processor
- RAM: 4GB
- Hard Disk Size: 250GB
- 2 USB Ports
- Video: 1024 x 768 minimum

**Load Cells**
A variety of high precision load cells are available for compression and tensile testing needs. Available load cells range from 5 N (1.1 lbf) to 5 kN (1125 lbf).

<table>
<thead>
<tr>
<th>Load Capacity</th>
<th>Certificate Code</th>
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<tbody>
<tr>
<td>0 to 5 N</td>
<td>0.5 kg/1.1 lbf</td>
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<tr>
<td>0 to 10 N</td>
<td>1 kg/2.2 lbf</td>
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<tr>
<td>0 to 25 N</td>
<td>2.5 kg/5.6 lbf</td>
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<td>0 to 50 N</td>
<td>5 kg/11 lbf</td>
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<td>0 to 100 N</td>
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<td>0 to 250 N</td>
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<td>200 kg/450 lbf</td>
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<td>0 to 5000 N</td>
<td>500 kg/1125 lbf</td>
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**Load Cells**

[50 N Load Cell Shown]

[5kN Load Cell Shown]
### Physical Specifications

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<tr>
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<th>VANTAGE&lt;sup&gt;NX&lt;/sup&gt; -1 (1900-2000)</th>
<th>VANTAGE&lt;sup&gt;NX&lt;/sup&gt; -1 (1900-2001)</th>
<th>VANTAGE&lt;sup&gt;NX&lt;/sup&gt; -1 (1900-2002)</th>
<th>VANTAGE&lt;sup&gt;NX&lt;/sup&gt; -2 (1902-2000)</th>
<th>VANTAGE&lt;sup&gt;NX&lt;/sup&gt; -2 (1902-2001)</th>
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<td>CROSSHEAD TRAVER</td>
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<td>1200mm</td>
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### Performance Data

#### Force Capacity
- Vantage=-1 = 1 kN (225 lbf)
- Vantage=-2 = 2 kN (450 lbf)
- Vantage=-5 = 5 kN (1125 lbf)
- Vantage= Duo = 5 kN (1125 lbf)

#### Force Measurement
Interchangeable load cells available from 5N (1.1 lbf) to 2kN (450 lbf)

#### Force Accuracy
10% to 100% Load Capacity: ±0.25% Measuring Value
Less than 10% Load Capacity: ±0.025% of Load Cell Capacity

#### Force Resolution
16 Bit A/D to 0,001 N

#### Position Resolution
0.6 μm (0.00002 inch)

#### Position Accuracy
±2.5 μm/25 mm (±0.0001 inch/1.0 inch) or 0.01% of Distance

#### Crosshead Guidance
Precision Ball Screw

#### Test Workspace
- **Single Column**
  - Width: Unlimited
  - Depth from Grip Adapter Center to Column: 89 mm (3.5 in)
- **Dual Column**
  - Column Width: 343 mm (13.5 in)
  - Depth from Grip Adapter Center to Column: 171.5mm (6.75 in)
  - Depth: Unlimited

#### Crosshead Speed
1 to 1000 mm/min (0.05 to 40 in/min)

#### Safety Features
Emergency stop button, upper & lower limit switches with over-travel protection and load cell overload protection

#### Power Requirements
110 VAC, 50/60 Hz / 220/230 VAC, 50 Hz / 240 VAC, 50 Hz

#### Operating/Storage Environment
- **Air Temperature:**
  - Operating: 10° to 50° C (50° to 122° F)
  - Storage: -25° to 70° C (-13° to 158° F)
- **Relative Humidity:**
  - Operating: 10% to 85% (Non-Condensing)
  - Storage: 5% to 90% (Non-Condensing)

#### PC-Based System Control with MAP4 Software
USB interface

#### Computer Requires
Microsoft .NET Framework 4.5

#### Crosshead TRAVER