



# Thwing-Albert Instrument Company

**More Than a Century of Testing Solutions**

The EJA Vantage 10 is the highest capacity tester in the Vantage Series, providing up to 10 kN (2000 lb) of tension/compression force. The EJA Vantage 10 has fully integrated system electronics and software controls.

## **Large Testing Capability**

Capable of testing above and below the moving crosshead, the Vantage 10 provides maximum testing flexibility. It can be configured with two load cells and a variety of test fixtures enabling the operator to switch from one test to another without any downtime.

- Extensive selection of grips and fixtures
- Broad range of tests including **tensile, peel, compression, cycling, tear, burst, ZDT, flex/bend, stress relaxation and insertion/extraction**
- Grips can be supplied with frame-mounted pneumatic switches to simplify testing and improve repeatability
- Automatic electronic calibration
- One-touch auto zero
- One serial interface to a PC
- Serial load cell interface
- Movable test control panel
- Easy installation

## **Variety of Grips & Fixtures**

Manual and air-operated grips, compression plates, environmental chambers, peel, coefficient of friction, burst, and puncture fixtures provide endless test possibilities.

## **Vantage 10 Universal Tensile Tester**



### **Software Control.**

The EJA 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™ Software** provides powerful capabilities for defining complex motion control and enabling unlimited test methods. MAP automatically generates a real-time curve, performs statistical analysis and exports results to database management packages including Access™ and Excel™.





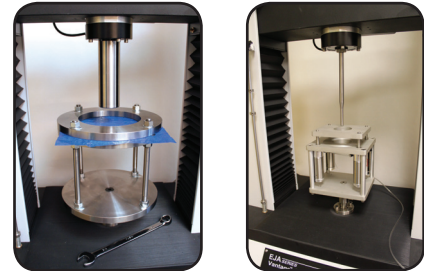
◀ The Vantage Series Universal Materials Tensile Testers offer a wide range of testing options.

# Specifications

## Physical Specifications\*

	Vantage 10 (1760-2000)	Vantage 10 (1760-2001)
<b>Width:</b>	508 mm (20 in)	508 mm (20 in)
<b>Depth:</b>	508 mm (20 in)	508 mm (20 in)
<b>Height:</b>	1143 mm (45 in)	1651 mm (65 in)
<b>Net Weight:</b>	175 kg (385 lbs)	200 kg (440 lbs)
<b>Crosshead Travel:</b>	610 mm (24 in)	1067 mm (42 in)

\*Above Dimensions do not include grips, fixtures & PC



▲ Examples of puncture fixtures used on the Vantage 10 tensile tester. A wide variety of grips and fixtures are available for use with the Thwing-Albert Vantage Series tensile testers.

## Performance Data

### Force Capacity

10 kN (2000 lbs)

### Force Measurement

Interchangeable load cells available:  
From 20 N (5.5 lbs) to 10kN (2,000 lbs)

### Force Accuracy

10% to 100% Load Capacity:  $\pm 0.25\%$  Measuring Value  
Less than 10% Load Capacity:  $\pm 0.025\%$  of Load Cell Capacity

### Force Resolution

16 Bit A/D to 0,001 N

### Position Resolution

0,6  $\mu\text{m}$  (0.00002 inch)

### Position Accuracy

$\pm 2.5 \mu\text{m}/25 \text{ mm}$  ( $\pm 0.0001 \text{ inch}/1.0 \text{ inch}$ )  
or 0.01% of Distance

### Crosshead Guidance

Precision Ball Screw with Independent Ground  
Stainless Steel Guide Rods

### Horizontal Clearance

412.75 mm (16.25 in)

### Depth Clearance

Unlimited

### System Control

PC-Based with serial interface (No PC slave cards)

### Operating System

Windows® 7, 8, and 10

### Crosshead Speed

1 to 1000 mm/min (0.05 to 40 in/min)

### Crosshead Accuracy

0.1%

### 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)

Specifications subject to change without notice.

Thwing-Albert Instrument Company

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