



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 eliminating the complications of interfacing with external control boxes or additional PC cards.

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 ranging from 1 kN to 10kN.

Specifications

Physical Specifications*

| | Vantage 10 (1760-2000) | Vantage 10 (1760-2001) |
|--------------------------|---------------------------|---------------------------|
| Width: | 508 mm (20 in) | 508 mm (20 in) |
| Depth: | 508 mm (20 in) | 508 mm (20 in) |
| Height: | 1143 mm (45 in) | 1651 mm (65 in) |
| Net Weight: | 175 kg (385 lbs) | 200 kg (440 lbs) |
| Crosshead Travel: | 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 μm (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® 98/NT/2000/XP

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.

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