

EJA Vantage™ Universal Materials Tensile Tester

EJA Vantage testing system provides maximum testing flexibility in a compact frame. Two low-profile frames are available providing capacities up to 1 kN (225 lb) or 5 kN (1,000 lb) of tension/compression force. Both frames fully integrate system electronics and software controls eliminating the complications of interfacing with external control boxes or additional PC cards.

Small footprint. Large test capability.

Only 250 mm (10 in) wide, the EJA Vantage provides the most testing versatility in the least amount of space. With a wide range of grips and fixtures available, the EJA Vantage test system provides a flexible platform for measuring tensile, peel, compression, cycling, tear, burst, ZDT, flex/bend, stress relaxation and insertion/extraction to name a few.

Testing to International standards across varied industries, the EJA Vantage is ideal for:

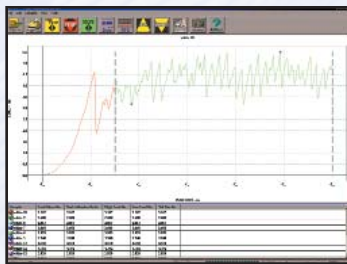
- ▷ Paper, Non-Wovens & Textiles
- ▷ Film, Plastics & Rubber
- ▷ Packaging Materials
- ▷ Biomaterials
- ▷ Adhesives

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.

Two Windows®-based materials testing software packages offer different levels of capability.

EJA Simplicity™ Software provides the ability to perform tension, compression and peel tests, store test data and analyze results.



▲ MAP shows test curves real time



▲ EJA Vantage shown with a JDC Precision Sample cutter.

MAP-3™ 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™

Features:

- Automatic electronic calibration
- One-touch auto zero
- Electronic air switches
- One Serial Interface to a PC
- Serial Load Cell interface
- User positionable test control panel
- Digital Motion Controller utilizing Pulse Width Modulation
- Easy installation
- Side electronics panel for easy access
- Industry Standards:
ASTM E4
ISO 5893, 7500-1, 9283
EN 1002/1-4



Variety of Grips & Fixtures



A wide range of grips and fixtures enable the EJA 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.

▲ **Extensometer Testing**

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 lb) to 5 kN (1000 lb).

Physical Specifications*

	<u>1750-2000</u>	<u>1750-2001</u>	<u>1750-2002</u>	<u>1755-2000</u>
Width	254 mm (10 in)	254 mm (10 in)	254 mm (10 in)	254 mm (10 in)
Depth	419 mm (16.5 in)	419 mm (16.5 in)	419 mm (16.5 in)	432 mm (17 in)
Height	1067 mm (42 in)	1321 mm (52 in)	1626 mm (64 in)	1346 mm (53 in)
Net Weight	51 kg (112 lbs)	59 kg (130 lbs)	68 kg (150 lbs)	100 kg (220 lbs)
Crosshead Travel (excluding grips and fixtures)	610 mm (24 in)	915 mm (36 in)	1200 mm (48 in)	915 mm (36 in) (extended frame available)

*Above Dimensions do not include PC.

Performance Data

Force Capacity

1 kN (225 lbs)
5 kN (1000 lbs)

Force Measurement

Interchangeable load cells available (see above list)

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

Horizontal Clearance

Unlimited

Depth Clearance

89 mm (3.5 in)

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)



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