

# product specification

## EJA Vantage™ Universal Materials Tensile Tester



### Description

The EJA Vantage™ from Thwing Albert offers the latest design in universal materials tensile testers. The unit is available in three different sized frames and, with a single screw design, the EJA Vantage™ is the smallest, most precise tester available.

The instrument is capable of exerting up to 2 kN of compression/tension force and is ideal for measuring the physical characteristics of a wide range of materials such as paper, film, non-wovens, adhesives, textile, packaging and biomedical substances.

A wide variety of fixtures are available to provide extensive test capabilities, including tensile, peel, compression, tear, cycling, stress relaxation, insertion/extraction.

### Benefits

These include a magnetic test control keypad that can be positioned by the operator for convenient access, a one-touch auto zero, electronic air switches for air-grip control and a software-based automatic calibration system.

### Options

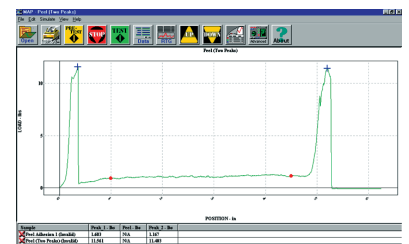
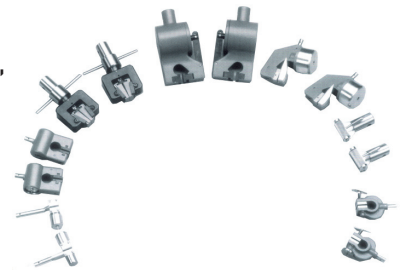
Grips and fixtures – manual and air-operated compression plates, 90° peel, coefficient of friction, burst, puncture fixtures and custom applications.

High precision load cells – 5 N, 10 N, 25 N, 50 N, 100 N, 250 N, 500 N, 1 kN, 2 kN.

Windows®-based software packages for test control

EJA Simplicity – for basic tension, compression and peel testing, data/curve storage and analysis.

MAP – a more powerful option, with custom test configuration capabilities for defining complex motion control and enabling unlimited test methods. Automatically generates a real-time curve, performs statistical analysis and exports results to a database and user-defined configurations to meet exact requirements.



# EJA Vantage™ Universal Materials Tensile Tester



## Features

- One serial interface to a PC – no PC interface cards required
- Digital motion controller using pulse with modulation
- Push-button auto zero
- Movable test control panel
- Serial load cell interface
- Automatic electronic calibration
- Electronic air switches
- Side electronics panel for easy access
- Easy installation

## Performance data

**Crosshead guidance** precision ball screw

**Crosshead speed** 1–1016 mm/min

**Horizontal clearance** unlimited

**Depth clearance** 89 mm

**Force capacity** 2 kN

**Force measurement** interchangeable load cells available (see Options)

**Force accuracy** 10–100% load capacity  $\pm$  0.25% measuring value

$\leftarrow$  10% load capacity  $\pm$  0.025% load cell capacity

**Force resolution** 16 bit A/D to 0.001 N

**Position resolution** 0.6  $\mu$ m (0.00002 in)

**System control** PC-based with serial interface (no PC interface cards)

Safety features emergency stop button, upper and lower limit switches with over-travel and load cell overload protection

**Operating/storage environment**

Air temperature – operating 10–50°C, storage –25–70°C

Relative humidity – operating 10–85% (non-condensing), storage 5–90% (non-condensing)

**Power requirements**

110 V, 50/60 Hz

220/230 V, 50 Hz

240 V, 50 Hz

## Physical specifications

**Dimensions (W x D x H)**

1750-2000 25.5 x 42 x 80 cm

1750-2001 25.5 x 42 x 132 cm

1750-2002 25.5 x 42 x 163 cm

**Net weight**

1750-2000 51 kg

1750-2001 59 kg

1750-2002 68 kg

**Crosshead travel –  
excluding grips and fixtures**

1750-2000 61 cm

1750-2001 91.5 cm

1750-2002 114.5 cm

