



**UNITEK** UniTek Products  
by CCSi

The UniTek™ F9400 Series Universal Testing Machines are microprocessor controlled electro-mechanical testers designed with state-of-the-art technology for testing and studying the physical properties and mechanical behavior of a wide range of materials such as polymers and elastomers.

#### UniTek™ F9400 Series: System Features

- Servo drive with ball lead screws providing an advanced drive system with a wide speed range;
- Load cell interchangeability & automatic selection of load scale and units;
- Microprocessor based system for data acquisition, storage, retrieval and display;
- Infinitely variable or incremental speed selection;
- Integral crosshead safety interlocks;
- A wide range of load cells, grips & accessories;
- Suitable for R&D, education, QC/QA and production control applications;
- Integral parallel printer interface.

#### UniTek™ F9400 Series: Control System Features

- 8085 microprocessor based measurement;
- Panel mounted membrane type keyboard;
- 7 segment digital display of load, extension displacement data in real time;
- Printer port for printing of data;
- Optional serial port for PC communications;
- Optional electronic extensometer;
- Storage of critical test data such as peak load, displacement at pre-load & maximum displacement;
- Keyboard selection of compression, tension or cyclic test types;
- Pre-load "thumbwheel" selection of from 0.01 to 1%;
- End of test crosshead position selector: "stop" or "return".

#### UniTek™ F9400 Series: Optional PC Software

Many UniTek™ F9500 series software packages are available for the F9700 Series when the optional Serial Port is ordered at the time of original shipment. It may not be retrofitted. Please visit the F9500 Series section for software details.

#### UniTek™ F9400 Series: Grips and Clamps

A wide range of grips and clamps are available:

- Wedge types for flat and round specimens;
- Vise types;
- Single strand (conductor);
- Pneumatic types;
- Compression plates;
- Bending fixtures;
- Shearing types.

#### UniTek™ F9400 Series: Extensometers

Electronic analog extensometers are available to measure extension with 1 $\mu$  resolution:

- Model 1: EE-2 Strain Gage
- Model 2: LTE-50 LVDT Type

#### UniTek™ F9400 Series: Strain Gauges

A variety of strain gage type load cells are available to meet most needs including:

- 1 kN;
- 2.5 kN;
- 5 kN;
- 10 kN;
- 50 kN;
- 100 kN.

## UniTek™ F9400 Series: Specifications

MODEL:	F9401	F9402.5	F9405	F9410	F9450	F94100
LOAD RANGE (kN):	0 – 1	0 – 2.5	0 – 5	0 – 10	0 – 50	0 – 100
LOAD RESOLUTION:	1/10000 of nominal load cell 1st Range (0–40% full scale)					
LOAD RESOLUTION:	1/4000 of nominal load cell 2nd Range (0-100% full scale)					
LOAD ACCURACY:	± 1% from 2 to 100% of load cell range					
VERTICAL CAPACITY:	1000 mm without grips or load cell					
COLUMN CLEARANCE:	450 mm					
CROSSHEAD SPEED:	0.5–500 mm/min					
CROSSHEAD MEASUREMENT:	0.01 mm					
POWER REQUIRED:	230 VAC, 50/60 Hz, 1 PH					
CONFORMS TO:	ASTM, BSI, ISO					
LIST PRICE:	<a href="#">Please Submit a Request for Quotation (RFQ)</a>					

## UniTek™ F9400 Series: Options

- Load Resolution: 0.01 mm resolution for crosshead displacement;
- Load: Full Scale of 20,000 or 50,000 counts;
- Printer or digital plotter;
- DC Servo Drive Package for extended speed ranges;
- Parallel port (must be included at time of order);
- F9500 Software Packages:
  - Basic Evaluation,
  - Extensive Evaluation,
  - Polymer–Elastomer–Textile,
  - Compression–Shear–Bending,
  - Torsional Testing,
  - Spring Testing,
  - Statistical Evaluation.

Copyright © 2006 CCSi, Inc. • All Rights Reserved • Published February, 2006

Corporate Consulting, Service & Instruments, Incorporated  
 221 Beaver Street • Akron, Ohio 44304 USA  
 Telephone: 800.742.8535 / 330.376.3600 • Facsimile: 800.229.9329 / 330.376.8500

• WWW.CCSI-INC.COM • WWW.ORECOZONE.NET •