3300 Series Single Column Models

Affordable Solutions for Material Testing

Today's testing laboratories and manufacturers have a wide range of material and component testing needs that range from simple standardized testing to advanced research applications. To meet these varying requirements, Instron® has different configurations of instruments to ensure the right solution to the testing application. Instron's 3300 series has been developed to address the needs of standardized and routine testing providing the user Instron quality at the most affordable price.

Simple

- Instron Series IX™/s software allows fast set-up and remarkable ease-of-use
- Automatic recognition and calibration of load and strain transducers
- Extended ranging conditioners eliminating operator intervention
- Column covers with t-slots for simple and convenient attachment of accessories

Affordable

- All test systems includes Series IX/s software and choice of load cell
- Instron quality and reliability means reduced operation costs
- System self-diagnostics to expedite trouble shooting and minimize downtime
- Compatibility with most existing Instron grips, fixtures and extensometers in your lab

Instron Quality

- High torque DC motor with closed-loop digital position control
- No clutch design for better reliability and reduced parts count
- Ball screw covers for longer life and greater operator protection
- Pre-loaded ball screw
- Full one year parts and labor warranty

Software for Standardized Testing

Each 3300 test system includes Instron's Series IX/s software package at no additional charge. Series IX/s, one of the world's most widely recognized materials test programs is ideal for standardized tests. Series IX/s, in one integrated software package, provides data acquisition, control, data analysis and report generation functionality for tensile, compression, flexure, friction and peel/ tear testing. To run a test, an operator simply selects a test method from a library that includes many standardized methods and the 3300 system is ready to test.

After each test, Series IX/s calculates the results that you have selected from a library of standard calculations, including yield, modulus, maximum load, break load and many others. When the last specimen in a sample/ batch has been tested, Series IX/s automatically prints a test results report and generates a test results data file.

For those applications not addressed by Series IX/s, Instron's Merlin™. advanced materials software is available as an option.

▲ **Instron model 3344 in colbalt blue configured for tensile strength and modulus testing of rubber**

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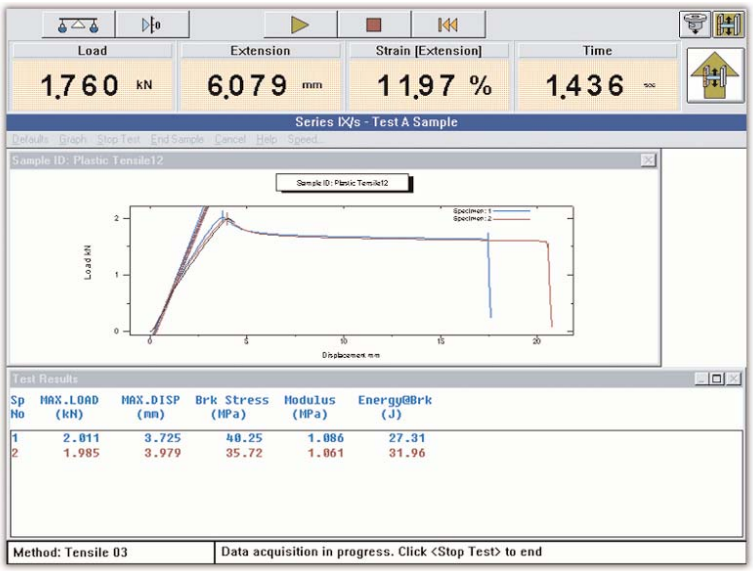
Specifications

Model Number		3342	3343	3344	3345
Load Capacity	kN kgf lbf	0.5 50 112.5	1 100 225	2 200 450	5 500 1125
Maximum Speed	mm/min in/min	1000 40	1000 40	1000 40	1000 40
Minimum Speed	mm/min in/min	0.05 0.002	0.05 0.002	0.05 0.002	0.05 0.002
Maximum Force at Full Speed	kN lb	0.5 112.5	1 225	2 450	5 1125
Maximum Speed at Full Load	mm/min in/min	1000 40	1000 40	1000 40	1000 40
Return Speed	mm/min in/min	1500 60	1500 60	1500 60	1000 40
Total Crosshead Travel	mm in	482 19.0	898 35.4	898 35.4	885* 34.8
Total Vertical Test Space (Note 2)	mm in	651 25.6	1067 42.0	1067 42.0	1123** 44.2
Depth Daylight	mm in	100 3.9	100 3.9	100 3.9	100 3.9
Height	mm in	900 35.4	1300 51.2	1300 51.2	1358*** 53.5
Width	mm in	382 15.0	382 15.0	382 15.0	382 15.0
Depth	mm in	500 19.7	500 19.7	500 19.7	500 19.7
Weight with Typical Load Cell	kg lb	38 83	42 94	42 94	51+ 112
Maximum Power Requirement	VA	170	200	240	300

*=1135 mm (44.7 in), **= 1383 mm (54.4 in), ***=1628 mm (64.1 in) with extra height option
+ = 57 kg (126 lb) with extra height option

Four Color Options

- Charcoal gray
- Magenta red
- Cobalt blue
- Teal green



▲
Series IX™/s run-time screen

Common Specifications

Load Measurement Accuracy
±0.5% of reading down to 1/100 of load cell capacity. Meets or exceeds ASTM E 4, BS 1610, DIN 51221, ISO 7500/1, EN 10002-2. JIS B7721, and AFNOR A03-501 standards.

Strain Measurement Accuracy
±0.5% of reading down to 1/50 of full scale with ASTM E 83 class B or ISO 9513 class 0.5 extensometer meets or exceeds ASTM E 83, BS 3846, ISO 9513 and EN 10002-4 standards.

Crosshead Speed Accuracy (Zero or Constant Load)
±0.2% of set speed

Single Phase Voltage
100, 120, 220, or 240 VAC ±10%, 47 to 63 Hz. Power supply must be free of spikes, surges or sags exceeding 10% of the average voltage.

Operating Temperature
+10 °C to +38 °C (+50 °F to +100 °F)

Storage Temperature
-40 °C to +66 °C (-40 °F to +150 °F)

Humidity Range
+10% to +90%, non-condensing

Atmosphere
Designed for use under normal laboratory conditions. Protective measures may be required if excessive dust, corrosive fumes, electromagnetic field or hazardous conditions are encountered.

Notes:
1. These systems conform to all relevant European standards and carry a CE mark.
2. Total vertical test space is the distance from the top surface of the base platen to the bottom surface of the moving crosshead, excluding load cell, grips and fixtures.

The above specifications were developed in accordance with Instron®'s standard procedures and are subject to change without notice.

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