# 3340 Series | Single Column Model

The Instron® 3300 Series addresses the needs of standardized and routine testing, providing the user Instron quality at the most affordable price. The 3340 single column testing systems are suited for tension and/or compression applications where tests are less than 5 kN (1,100 lbf) and lab space is limited. They are typically used for quality control and production testing. Four single column models are available in load capacities of 0.5, 1, 2, and 5 kN with vertical test daylight ranging from 651 to 1383 mm.

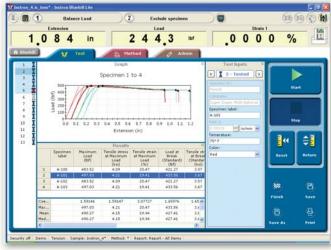
## Instron Quality at an Affordable Price

Our attention to every element of the system is what separates Instron from other testing equipment suppliers and allows us to confidently report the accuracy, repeatability, and reproducibility of our results.

- Automatic recognition and calibration of load and strain transducers and verification performed by factory-trained field service engineers
- Preloaded ballscrews, precision guidance columns, and a symmetrical drive system improve frame stiffness and alignment
- Extensive range of accessories to meet test requirements in almost any application or industry: plastics, metals, biomedical, composites, elastomers, components, automotive, aerospace, textiles, and more.
- Self-diagnostics expedite troubleshooting and minimize downtime
- · All testing systems include choice of load cell
- · Full one-year warranty on parts and labor

# Start Testing in Two Steps: Open a Method, Press Start

With multiple operators, varying skill levels, and continuous training needs, you need a user interface that is simple to learn. Instron Bluehill® Lite Software is designed to meet the demands of everyday applications and testing standards used in a wide variety of industries. Bluehill Lite provides all the capabilities you need to handle basic tensile, compression, flexure, peel, tear, friction, and simple cyclic test requirements quickly and efficiently. Tests are started with just two steps, and test control, data acquisition, plotting, calculations, and reporting are performed automatically. To further assist the operator, the Prompted Method guides operators through repetitive test procedures with step-by-step instructions.



Typical Bluehill® Lite test screen



#### Confidence in Your Results

Head-to-head comparison reveals the Instron® difference. Notice the difference in variability of measured peak load between the two machines - this is the kind of measurable difference that sets Instron apart.

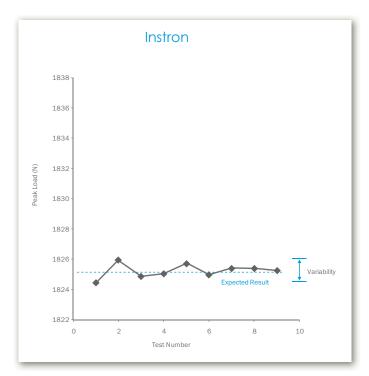
### Case Study

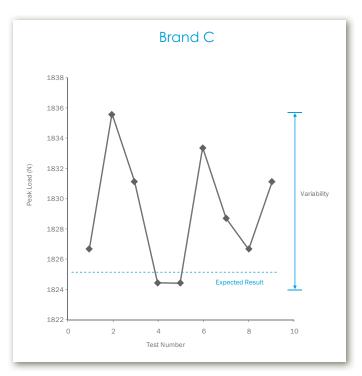
· Same operator

· Same specimen: Coil spring

· Same test conditions: Compression test

· Different machines: Instron vs. Brand C





<sup>\*</sup>Reference paper available upon request or you can visit the literature section of www.instron.com

# Why Does Better Repeatability and Reproducibility Matter to You?

- · More parts pass your acceptance criteria, less parts rejected
- Less time spent in trouble-shooting data problems
- Long-term cost savings
- · Strengthening of your testing lab's reputation
- · Increased ability to meet delivery expectations
- More parts ship, increasing your bottom line



### **Specifications**

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

#### Notes:

- 1. All systems conform to all relevant European standards and carry a CE mark.
- 2. Total vertical test space on all systems 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.

#### Two Color Options

- · Charcoal Gray
- Cobalt Blue

#### Common Specifications Load Measurement Accuracy

±0.5% of reading down to 1/100 of load cell capacity. Meets or exceeds ASTM E4, ISO 7500/1, EN 10002-2, JIS B7721.

#### Strain Measurement Accuracy:

 $\pm 0.5\%$  of reading down to 1/50 of full scale with most ASTM E83 class B or ISO 9513 class 0.5 extensometers. Meets or exceeds ASTM E83, ISO 9513, and EN 10002-4.

# Crosshead Speed Accuracy (Zero or constant load):

±0.2% of set speed

#### Single Phase Voltage:

100, 120, 220, or 240 VAC  $\pm$ 10%, 47 to 63 Hz. Power supply must be free of spikes, surges or sags exceeding 10% of the average voltage.

#### Operating Temperature:

+10 to +38°C (+50 to +100°F)

#### Storage Temperature:

-40 to +66°C (-40 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.

www.instron.com



Worldwide Headquarters 825 University Ave, Norwood, MA 02062-2643, USA Tel: +1 800 564 8378 or +1 781 575 5000 European Headquarters Coronation Road, High Wycombe, Bucks HP12 3SY, UK Tel: +44 1494 464646 Instron Industrial Products 900 Liberty Street, Grove City, PA 16127, USA Tel: +1 724 458 9610

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<sup>+ = 57</sup> kg (126 lb) with extra height option