

LX Models

Industrial Series LX Models are designed for high-capacity tension, compression, bend/flex, and shear testing. Featuring a large single, test space that delivers exceptional flexibility and a small footprint, these frames are available in a 300 kN (67,500 lbf) capacity. Understanding the critical importance of operator safety, the Instron® LX Models are CE compliant and incorporate high-quality materials, components, and craftsmanship.

FEATURES AND BENEFITS

- Large, single test space design adapts to a wide range of specimen sizes, grips, fixtures, and extensometry
- Dual-acting actuator offers precise control for tension and compression testing
- Load frame, hydraulic power supply, and controller combined in a single package saves valuable lab floor space while providing a protective environment for hydraulic and electrical components
- Optional hydraulically adjustable and clamping crosshead simplifies changing test opening for load strings or specimens of varying lengths
- Optional open-front hydraulic wedge grips improve operator safety and throughput, and allow a limited number of jaw faces to cover a large range of specimen sizes
- Convenient working height, large toe relief area, and ergonomic controls increase operator productivity and comfort
- Productivity panel with multiple function keys and displays allows the operator to perform common testing functions and view key test information without returning to the computer
- Powerful, yet user-friendly materials testing software provides repeatable and reproducible results for simple to sophisticated testing requirements
- Variable pressure hydraulic power supply provides pressure on demand, reducing heat generation, increasing oil life, and eliminating the need for water cooling
- 300 kN (67,500 lbf) Capacity

TESTING APPLICATIONS

- Metals - Bar, Plate, Pipe & Tube, Rebar, Structural
- Fasteners
- Wire Rod
- Composites

STANDARDS

LX Models conform to many International Standards, including (but not limited to):

- ASTM A370, A615, E4, E8, E83, E290, F606
- EN10002-1, 10002-2, 10002-4
- ISO 6892-1, 6892-2, 7438, 9513, 12100, 13849-1, 15630-1
- JIS Z2241, Z2248
- BS4449



ACCESSORIES

- Tensile Grips - flat, round, button head
- Bend/Flex and Shear Fixtures
- Fastener Fixtures
- Furnaces
- Compression Platens - plane and self-aligning
- Extensometers, Deflectometers
- Low-Capacity Load Cells
- Interlocked Safety Enclosures

SPECIFICATION TABLE

Model	Load Capacity			Horizontal Opening (between columns)		Maximum Test Speed		Actuator Stroke		Floor Space Requirements (W × D)	
	kN	kgf	lbf	mm	in	mm/min	in/min	mm	in	mm	in
300 LX	300	30,000	67,500	508	20	152	6	305	12	786 × 993	30.94 × 39.13

Configuration	Description
J1	Manually Adjustable Crosshead with Notched Columns
J3	Hydraulically Adjustable and Clamplng Crosshead with Smooth Columns

Model	Tension Opening (Adjustable)		Maximum Operating Height		Net Weight	
	mm	in	mm	in	kgs	lbs
J1E1	305 - 965	12 - 38	2388	94	1045	2300
J1E2	305 - 1321	12 - 52	2743	108	1060	2340
J1E3	305 - 1854	12 - 73	3277	129	1100	2420
J3E3	0 - 1854	0 - 73	3380	133	1360	3000

COMMON SPECIFICATIONS

Data Acquisition Rate by Software
Up to 1 kHz synchronous on load and strain

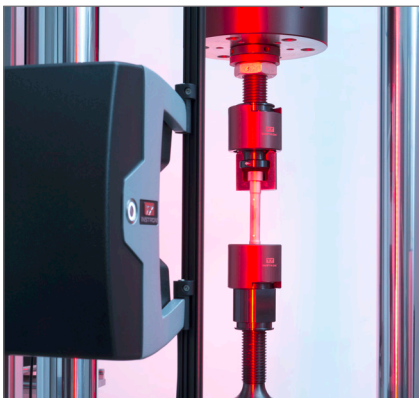
Load Measurement Accuracy
± 0.5% of reading down to 1/500 of load
cell capacity

Strain Measurement Accuracy
Meets or surpasses the following standards:
ASTM E83, ISO 9513, and EN 10002-4

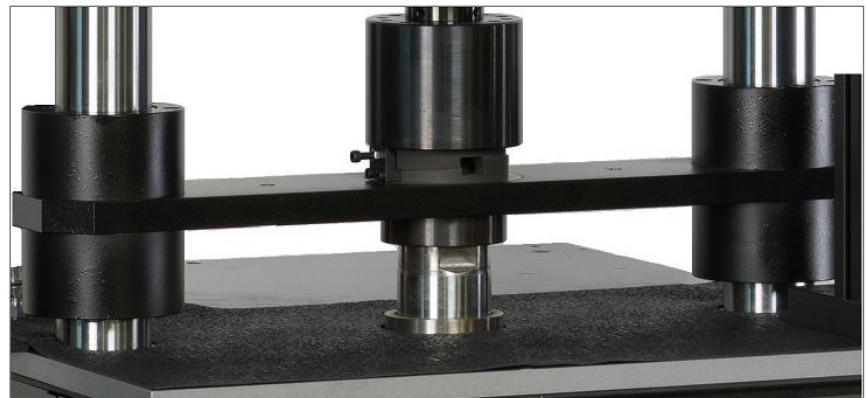
Displacement Measurement
1.0 µm (0.00004 in) resolution
Accuracy of ±0.5% or 0.13 mm (0.005 in)
displacement (whichever is greater)

Hydraulic Power Supply
Voltage Options
200-250 VAC, 3PH, 50/60 HZ, 15 Amps
380-415 VAC, 3PH, 50/60 HZ, 10 Amps
440-480 VAC, 3PH, 50/60 HZ, 10 Amps

Notes: Linear guidance option (H2) reduces available test opening dimensions by 178 mm (7 in)



300 kN Split Tensile Holders for Testing .505
Button Head Specimens on 300LX



300LX with Linear Guidance option (H2)

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