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 300 kN (67,500 lbf) and 600 kN (135,000 lbf) capacities. 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
- Available capacities:
  - 300 kN (67,500 lbf)
  - 600 kN (135,000 lbf)

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

<table>
<thead>
<tr>
<th>Model</th>
<th>Load Capacity</th>
<th>Horizontal Opening (between columns)</th>
<th>Maximum Test Speed</th>
<th>Actuator Stroke</th>
<th>Floor Space Requirements (W × D)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>kN</td>
<td>kgf</td>
<td>lbf</td>
<td>mm</td>
<td>in</td>
</tr>
<tr>
<td>300 LX</td>
<td>300</td>
<td>30,000</td>
<td>67,500</td>
<td>508</td>
<td>20</td>
</tr>
<tr>
<td>600 LX</td>
<td>600</td>
<td>60,000</td>
<td>135,000</td>
<td>609</td>
<td>24</td>
</tr>
</tbody>
</table>

### Configuration

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>System Compatibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>J1</td>
<td>Manually Adjustable Crosshead with Notched Columns</td>
<td>300 LX, 600 LX</td>
</tr>
<tr>
<td>J3</td>
<td>Hydraulically Adjustable and Clamping Crosshead with Smooth Columns</td>
<td>300 LX, 600 LX</td>
</tr>
</tbody>
</table>

### 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)