## Industrial Series

**KX** Models

The Instron® Industrial Series KX Models are designed primarily for high-capacity tension testing. Featuring an ultra-large single test space and fixed-height crosshead, these frames deliver advanced testing capabilities for many applications and are available in capacities ranging from 600 - 1500 kN (135,000 - 337, 500 lbf). Understanding the critical importance of operator safety, the KX Models incorporate high-quality materials, components, and craftsmanship.

### Features and Benefits

- Fixed-height crosshead and ultra-large single test space allows simple operation for common metals applications and load strings
- Convenient working height and ergonomic controls improve operator productivity and comfort
- Machine base design reduces operator fatigue by allowing the operator to get close to the load string centerline when installing specimens
- Anti-rotation system prevents actuator from rotating during test stroke
- Long stroke, high-speed actuator is well-suited for tension applications requiring repetitive testing of similar size specimens
- Optional open-front hydraulic wedge-action and side-acting grips improve operator safety and throughput, and allow a limited number of jaw faces to cover a large range of specimen sizes
- 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 frame capacities:
  - 600 kN (135,000 lbf)
  - 1500 kN (337,500 lbf)

#### **Testing Applications**

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

#### **Standards**

KX Models conform to many international standards, including (but not limited to):

- ASTM A370, A615, E4, E8, E290, F606
- ISO 6892-1, 6892-2, 7438, 7500-1, 9513, 15630-1
- BS 4449
- EN10002-1, 10002-2
- JIS Z2241, Z2248



#### **Accessories**

- Hydraulic Wedge Action and Side-Acting Grips
- Extensometers, Deflectometers
- Fastener Fixtures

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## **Specifications**

•		600KX	1500KX
	kN	600	1500
Load Capacity	kgf	60,000	150,000
	lbf	135,000	337,500
Test Stroke	mm	508	610
	in	20	24
Maximum Test Speed	mm/min	203	203
	in/min	8	8
Horizontal Test Opening	mm	762	876
	in	30	34.5
Machine Base Depth	mm	330	438
	in	13	17.25

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		600KX-J4A	1500KX-J4A	1500KX-J4B
Vertical Test Opening <sup>1</sup>	mm	1,022 - 1,530	1,251 - 1,861	1,657 - 2,267
	in	40.25 - 60.25	49.25 - 73.25	65.25 - 89.25
Maximum Machine Height	mm	3,210	4,020	4,430
	in	126	158	174
Machine Weight	mm	1,920	4,190	4,320
	in	4,225	9,225	9,520

#### Notes:

## Load Cell Options for 1500KX

	kN	1,000
L1	kgf	100,000
	lbf	225,000
	kN	1,500
L3	kgf	150,000
	lbf	337,500

## 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 ± 0.5% of reading down to 1/50 of full range with ASTM E83 Class B-1, B-2 or ISO 9513 Class 0.5 extensometer

Position Accuracy  $\leq \pm~0.13 mm~(0.005~in)$  or  $\pm~0.5\%$  of displayed reading, whichever is greater

Position Control Resolution 1.27 µm (0.00005 in)

Hydraulic Power Supply Voltage Options: 208/230 VAC, 3 Ph, 50/60 Hz 380/400/415 VAC, 3 Ph, 50/50 Hz 460 VAC, 3 Ph, 50/60 Hz

#### Spare Parts Kits

W-1854-A 600KX Basic Kit
W-1854-B 600KX Recommended Kit
W-1854-C 600KX Comprehensive Kit
W-1855-A 1500KX Basic Kit
W-1855-B 1500KX Recommended Kit
W-1855-C 1500KX Comprehensive Kit





<sup>1.</sup> Measured between bottom of load cell and top of machine base. Please consult price book descriptions for minimum and maximum specimen length limitations when using either hydraulic wedge or side-acting grips.