

Industrial Series | DX Compression-Only Models

Industrial Series DX Compression-Only Models are designed for high-capacity compression, bend/flex, and shear testing. Featuring a single footprint, these frames are available in capacities of 300 and 600 kN (67,500 and 135,000 lbf). Understanding the critical importance of operator safety, the Instron® DX Models are constructed of high-quality materials, components, and craftsmanship.

Features and Benefits

- Single compression-only test space design is ideal for compression testing on metals, concrete, and soil specimens
- Special fixtures available for stabilometer and moisture exudation 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
- Easy-to-adjust upper crosshead assembly facilitates changing fixtures and specimens
- Convenient working height 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 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

- Asphalt
- Concrete/Refractory Products - Cubes, Cylinders, Bricks
- Metals
- Soil
- Wood
- Components

Standards Compliance

DX Compression-only Models conform to many international standards, including (but not limited to):

- ASTM A370, C39, C99, C109, C880, D2844, E4, E9, E83, and E290
- CTM (California Test Method) 301, 304, 308, 360, 366, 371, and 373
- ISO 7438
- JIS Z2248



Accessories

- Bend/Flex and Shear Fixtures
- Compression Platens - Plane and Self-Aligning
- Extensometers, Deflectometers
- Safety Enclosures
- Compression Table Extension for Supporting Fixtures (Stabilometer, etc)

		300DX	600DX
Crosshead Style	Closed	G8A	G8A
Load Capacity	kN	300	600
	kgf	30,000	60,000
	lbf	67,500	135,000
Maximum Test Speed	mm/min	76	76
	in/min	3	3
Actuator Stroke	mm	152	152
	in	6	6
Crosshead Adjusting Speed	mm/min	380	380
	in/min	15	15
Horizontal Opening (between columns)	mm	395	526
	in	15.563	20.687
Vertical Compression Opening*	mm	171 - 679	146 - 679
	in	6.75 - 26.75	5.75 - 26.75
Compression Table Size	mm	356 × 356	508 × 559
	in	14 × 14	20 × 22
Crosshead Thickness	mm	98	178
	in	3.875	7
Frame Height	mm	1855	1880
	in	73	74
Floor Space Requirements (W × D)	mm	759 × 755	974 × 970
	in	29.875 × 29.688	38.375 × 38.188
Net Weight	kgs	800	1790
	lbs	1765	3940
Shipping Weight	kgs	1141	2130
	lbs	2515	4690
Shipping Dimensions (L × W × H)	mm	1168 × 1116 × 2083	1300 × 1245 × 2134
	in	46 × 44 × 82	51 × 49 × 84

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

Position Measurement Accuracy

Standard Encoder:

6.35 µm (0.00025 in) resolution and position accuracy: ±1% or 0.254 mm (0.01 in) displacement (whichever is greater)

High Resolution Encoder:

1.27 µm (0.00005 in) resolution and position accuracy: ±0.5% or 0.13 mm (0.005 in) displacement (whichever is greater)

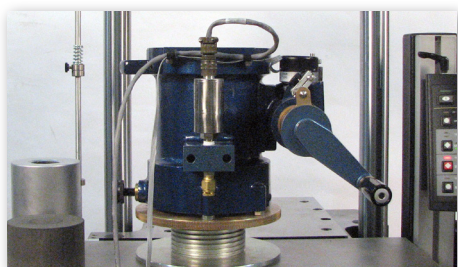
Hydraulic Power Supply Voltage Options:

115V±10%, 1 Ph, 60 Hz, 30 Amp
230V±10%, 1 Ph, 60 Hz, 15 Amp
220V±10%, 1 Ph, 50 Hz, 15 Amp

Spare Parts Kits:

W-1338-A 300DX Basic
W-1338-B 300DX Recommended
W-1338-C 300DX Comprehensive
W-1337-A 600DX Basic
W-1337-B 600DX Recommended
W-1337-C 600DX Comprehensive

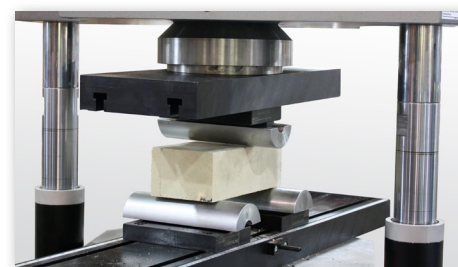
*Minimum Compression Includes Stroke, Measured between Crosshead and Table



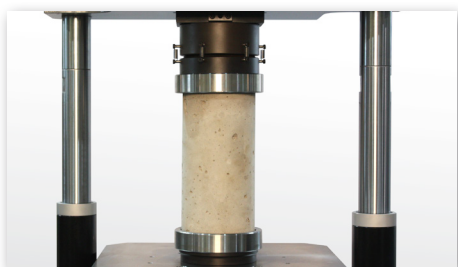
Stabilometer Testing with optional table extension



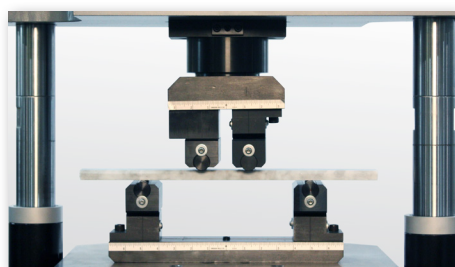
Moisture Exudation Testing



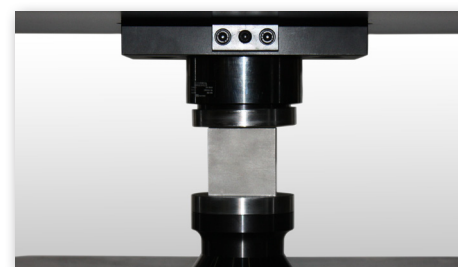
3-Point Flexure Testing on Refractory Brick



Concrete Cylinder Testing



4-Point Flexure Testing on Marble



Concrete Cube Testing

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