

639 Family Electrohydraulic Compression Test Machines

Overview

639 Family Compression Test Machines are the best choice for performing static compression applications when high force capacity is needed, such as metals, sand compaction (fracking), concrete, cubes, bricks, cylinders, asphalt, wood, components, soil specimens and much more. 639 Family test machines feature capacities up to 2 MN (450 kip). This test machine is configured to eliminate unnecessary features and provides the most affordable and easy to use option for many customers.

Applications

Higher force testing applications for metals, sand compaction (fracking), concrete, cubes, bricks, cylinders, asphalt, wood, components, soil specimens and much more.

Features and Benefits

- Designed in accordance to ASTM C39, AASHTO T22
- Servohydraulic
- Suitable for cylinders, cubes, beams and cores of high-strength concrete mixes
- 22.2 kN to 2224 kN (5,000 lbf to 500,000 lbf) testing range with accuracy of $\pm 0.5\%$ of indicated load
- Suitable for concrete strength up to 14,000 psi for 150 mm (6 in) diameter cylinders
- Standard configuration includes platens to test 150 mm x 300 mm (6 in x 12 in) cylinders
- Large frame opening to allow easier loading of test specimen
- Mounting stand is INCLUDED
- Optional test platens and accessories available

Closed Loop Controller

- Newton offers three pre-configured software packages to meet technical and budgetary requirements.
- The Servocontroller communicates with Newton Software and displays test results and graphs in real-time.
- Automatically calculates a wide variety of material properties and automatically generates a customizable test report.

Accessories

- Flexural bend fixtures
- Shear fixtures
- Compression platens – fixed & self-aligning
- Extensometers and deflectometers
- Safety Enclosures



639 Concrete Compression System

Specifications

Machine Model	639-2000	639H-2000	639H-3000
Load Capacity	2,224 kN (500,000 lbf)	2000 kN (450,000 lbf)	3000 kN (575,000 lbf)
Maximum Speed	40 mm/min (1.6 ipm)	40 mm/min (1.6 ipm)	40 mm/min (1.0 ipm)
Minimum Speed	0.05 mm/min (0.002 ipm)	0.05 mm/min (0.002 ipm)	0.05 mm/min (0.002 ipm)
Max Compression Height	467 mm (18.375 in)	450 mm (18 in)	450 mm (18 in)
Total Actuator Travel	63.5 mm (2.5 in)	150 mm (6 in)	150 mm (6 in)
Lower Compression Platen	318 mm x 475 mm (12.5 in x 18 in)	400 mm x 400 mm (15 in x 15 in)	400 mm x 400 mm (15 in x 15 in)
Upper Compression Platen Diameter	165 mm (6.5 in)	300 mm (12 in)	300 mm (12 in)
Dual Column Clearance	356 mm (14 in)	500 mm (19.5 in)	500 mm (19.5 in)

*Platen size can be customized

Note: Specifications are subject to change at any time without notice.

[Contact us to request a quote and confirm specifications](#)