



NextGen Electromechanical 50-600kN Universal Testing Machine

NG- EML CLASS D - Double Column Floor-Standing

The EML Class D Series addresses the needs of standardized and routine testing, providing the user high quality at the most affordable price. The dual column testing systems are suited for tension and/or compression applications with load range requirements from 50kN to 600kN. They are typically used for quality control and production testing.

Typical Specimens

Metals, building components, large fasteners, composites, wood products

Environmental simulation

Environmental Chamber and high temperature furnace

New Features

- Robust guidance columns increase lateral stiffness and ensure linear crosshead travel. This results in accurate crosshead alignment thus reducing variability in measurement data and producing better overall accuracy
- Non-clutched drives, rated for full speed at maximum force
- Compact design saves lab space
- Wider test width



High Quality at Affordable Price

- Pre-loaded ball screws and heavy duty bearings assure long life with zero backlash as well as linear low force and through zero performance. The result is accurate and repeatable measurements that truly represent the specimen characteristics rather than load frame deficiencies
- Fully-protected lead screw covers provide longer life and greater operator protection
- Easy-to-clean aluminum column covers with chamfered corners to facilitate access to the test area. T-slots are built in for simple, convenient attachment and positioning of testing accessories
- High-speed, low vibration, world-class, maintenance-free AC servo motor and servo controller
- Photoelectrical encoder built in servo motor system is for position measurement of crosshead
- Built-in bidirectional load cell is assembled in the middle crosshead to prevent any collisions and simple to perform compression or tension tests
- Dual action over-travel limits on all frames provide the highest level of safety and meet all international standards
- Remote control keypad facilitates test operation
- Upgraded controller provides high speed data acquisition with 8-CH A/D converting
- Full one-year warranty on parts and labor

Various frames to satisfy your test needs from low force to high force

Heavy duty load frame 200/300kN is available with single and dual test space, saving time and labor to change fixtures when frequently performing tension and compression/flexure tests.

Standard equipped with wedge action tensile grip, and optional hydraulic tensile grip is available.

Heavy duty load frame 500/600kN is dual test space equipped with hydraulic tensile grip for large and high strength specimen.



200/300kN

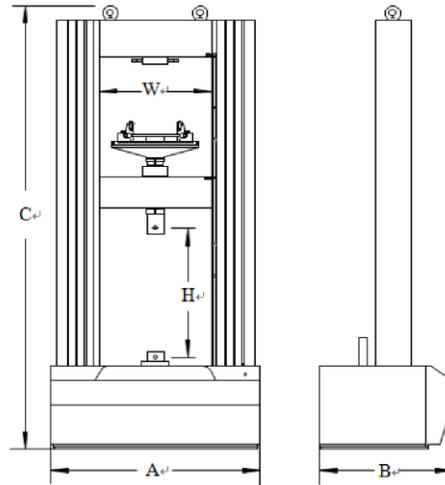


Full complement of test accessories

Extensive range of accessories to meet test requirements in almost any application or industry: plastics, metals, biomedical, composites, elastomers, components, automotive, aerospace, textiles, and more.

- Tension grip
- Peel/tear fixture
- Compression fixture
- Flexure fixture
- Film COF test fixture
- S type load cells: 10N-5kN
- Long travel extensometer
- Clip-on extensometer
- Environmental chamber
- T-slot table
- Others





Machine Frame	Grip Adapter	Pin
EML504D, EML105D	Φ40mm	Φ18mm
EML205D, EML305D	Φ60mm	Φ28mm
EML505D, EML605D	M64 x 4 screw connection	

Machine Dimensions – EML504D EML105D				
Test Space	Frame Type	Width x Depth x Height A x B x C (cm)	Crosshead travel H (cm)	Test width W (cm)
Single	Standard	114.5 x 76.5 x 234	115	60
	Extended Frame	114.5 x 76.5 x 264	145	60
Dual Space Upper compression / Lower Tension	Standard	114.5 x 76.5 x 234	105	60
	Extended Frame	114.5 x 76.5 x 264	135	60
Dual Space Upper Tension / Lower Compression	Standard	114.5 x 76.5 x 234	115	60
	Extended Frame	114.5 x 76.5 x 264	145	60

Machine Dimensions – EML205D EML305D				
Test Space	Frame Type	Width x Depth x Height A x B x C (cm)	Crosshead travel H (cm)	Test width W (cm)
Single	Standard	121 x 77 x 260	120	65
	Extended Frame	121 x 77 x 290	150	65
Dual Space	Standard	121 x 77 x 260	115	65
Upper compression / Lower Tension	Extended Frame	121 x 77 x 290	145	65
Dual Space	Standard	121 x 77 x 260	115	65

Upper Tension / Lower Compression	Extended Frame	121 x 77 x 290	145	65
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Machine Dimensions – EML505D EML605D				
Test Space	Frame Type	Width x Depth x Height A x B x C (cm)	Crosshead travel H (cm)	Test width W (cm)
Dual Space Upper compression / Lower Tension	Standard	153.5 x 117.5 x 300	140	70
	Extended Frame	153.5 x 117.5 x 330	170	70

Specifications

NG-EML Class D						
Model	EML504	EML105	EML205	EML305	EML505	EML605
Class	Class D					
Capacity (kN)	50	100	200	300	500	600
Calibration standard	ISO 7500, Class 1 / Class 0.5					
Force range	0.2% ~ 100%FS / 0.4 ~ 100%FS					
Force accuracy	±1.0% / ±0.5% of reading					
Force resolution	1/500000FS					
Position accuracy	±0.50% of reading					
Position resolution (µm)	0.048		0.014		0.021	
Crosshead speed (mm/min)	0.001 - 500			0.001 - 250		
Crosshead speed accuracy	within ±1% / ±0.5% of set speed					
Power requirement	One-phase, 220±10% VAC 50/60Hz		Three-phase, 220±10% VAC, 50/60Hz			
Power consumption	2kW		5kW		5.5kW	
Weight (kg)	1200		1500		2000	

Shipping Information

Model	EML504D EML105D	EML205D EML305D	EML505D EML605D
Package	Fumigated wooden case		
Crated dimension (WidthxDepthxHeight) (cm)	98" x 44" x 36.6" 249 x 122 x 93 cm	109" x 53" x 36.6" 276 x 134 x 93 cm	113" x 60" x 54" 286 x 151 x 137 cm
Crated weight (kg)	2866 lbs. / 1300 kg	3530 lbs. / 1600 kg	4850 lbs. / 2200 kg