



ELECTROMECHANICAL UNIVERSAL TESTING MACHINE SERIES D

RoboTest Series D Electromechanical Universal Testing Machine addresses the needs of standardized and routine testing, providing the user high quality at the most affordable price. The dual column testing systems with rugged structure 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

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, Japanese made 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
- 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
- DTC-350 controller provides high speed data acquisition with 8-CH A/D converting
- Free software upgrading.

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



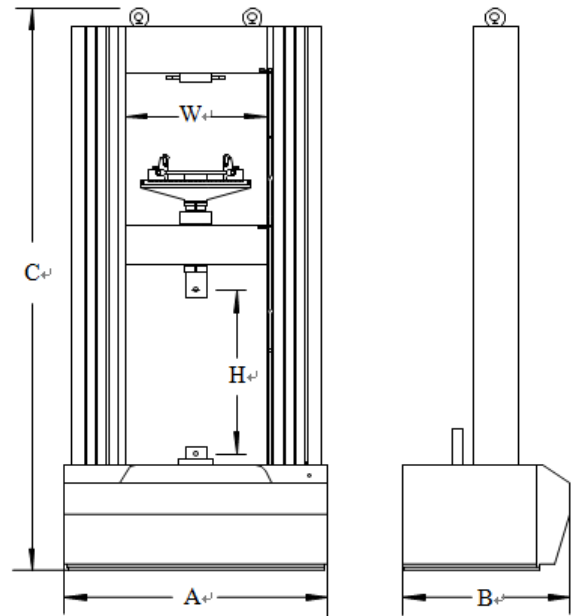
500/600kN



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
- Furnace
- T-slot table
- Others



Machine frame	Grip Adapter	Pin
RETM-504D, RETM-105D	Φ40mm	Φ18mm
RETM-205D, RETM-305D	Φ60mm	Φ28mm
RETM-505D, RETM-605D	M64 x 4 screw connection	



MACHINE DIMENSION: RETM-504D, RETM-105D

Test space	Frame type	Width x Depth x Height A x B x C (mm)	Crosshead travel H (mm)	Test width W (mm)
Single	Standard	1145×765×2340	1150	600
	Extended frame	1145×765×2640	1450	600
Dual space Upper compression lower tension	Standard	1145×765×2340	1050	600
	Extended frame	1145×765×2640	1350	600
Dual space Upper tension lower compression	Standard	1145×765×2340	1150	600
	Extended frame	1145×765×2640	1450	600

MACHINE DIMENSION: RETM-205D, RETM-305D

Test space	Frame type	Width x Depth x Height A x B x C (mm)	Crosshead travel H (mm)	Test width W (mm)
Single	Standard	1210×770×2600	1200	650
	Extended frame	1210×770×2900	1500	650
Dual space Upper compression lower tension	Standard	1210×770×2600	1150	650
	Extended frame	1210×770×2900	1450	650
Dual space Upper tension lower compression	Standard	1210×770×2600	1150	650
	Extended frame	1210×770×2900	1450	650

MACHINE DIMENSION: RETM-505D, RETM-605D

Test space	Frame type	Width x Depth x Height A x B x C (mm)	Crosshead travel H (mm)	Test width W (mm)
Dual space Upper compression lower tension	Standard	1535×1175×3000	1400	700
	Extended frame	1535×1175×3300	1700	700



SPECIFICATIONS

Model	RETM-504D	RETM-105D	RETM-205D	RETM-305D	RETM-505D	RETM-605D
Type	Series 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	1/350000FS					
Position accuracy	±0.50% of reading					
Position resolution (µm)	0.025		0.014			
Crosshead speed (mm/min)	0.001 ~ 500		0.001 ~ 250			
Crosshead speed accuracy	within ±1% / ±0.5% of set speed					
Crosshead travel (mm)	1150		1200		1400	
Test width (mm)	600		650		700	
Dimension (mm)	1145x765x2340		1210x770x2600		1535x1175x3000	
Power requirements	AC380V±10%, 50/60Hz					
Power consumption	1.5kW		5kW		5.5kW	
Weight (kg)	1200		1500		2000	