



20-50kN Electromechanical Universal Testing Machine

NG- EML CLASS C - Double Column Table Top

The EML Class C 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 20kN to 50kN. They are typically used for quality control and production testing.

Typical Specimens

Small components, reinforced plastics, metals, wire, composites, elastomers, wood products, textiles, biomaterials, paper products, adhesives, foam, consumer products

Environmental Simulation:

Environmental Chamber

Frame:

- Robust guidance columns with self-lubrication 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
- 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



Driving System:

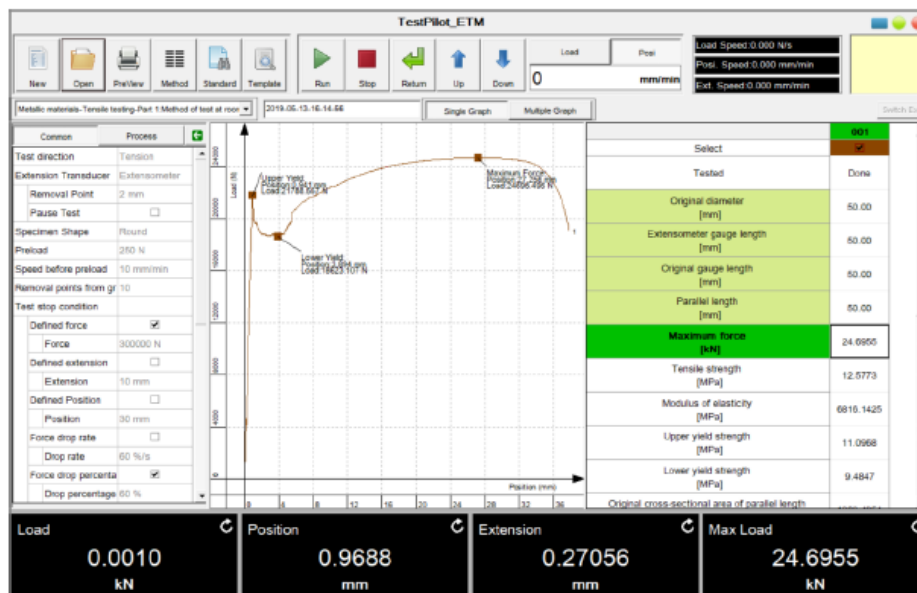
- Japanese YASAKAWA AC servo motor and arc shape silent synchronous belt features high speed, low vibration, world class, and maintenance free



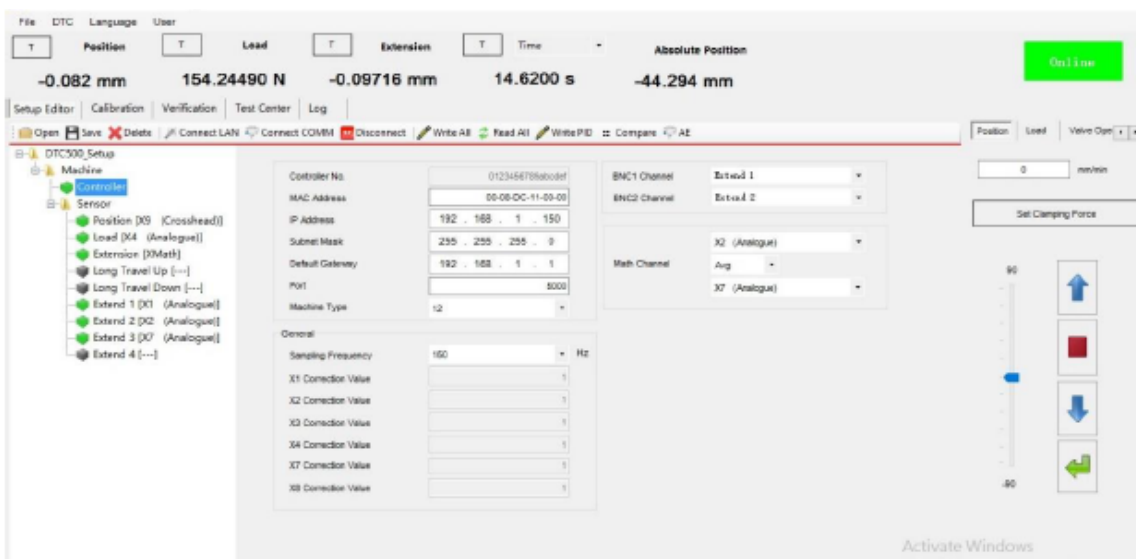


Software

- Professional test software and controller software are running independently. Controller software can define transducer information such as connector number definition and calibration data, also calibration is processed in controller software
- Compatible with Windows 7 to latest version, 32bit and 64bit
- User authorization management is easily to define software access for different level of operators, like lab manager, operator and others
- Real time display of transducer value, such as crosshead, load cell, and extensometer
- Multiple graph display, and Real time plot and switch graph of force, position, extensometer, stress, strain, time, etc.
- Pre packaged test methods to help you quickly and efficiently meet the requirements of global test standards such as ASTM, ISO, DIN, EN, BS, and more
- Intuitive expression for easy programming of testing standards and testing process
- Testing report can be customized according to the requirement
- Analysis can give typical test results like Young's modulus, Proof stress, Yield stress, stress, strain, Tensile strength, Elongation at break, compressive strength, bending strength, etc....
- Specimen protection function



Test software

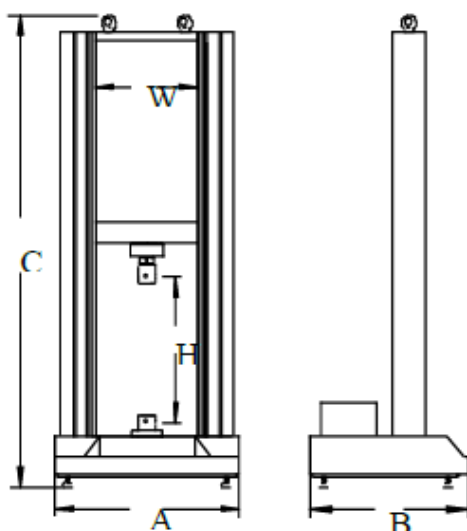




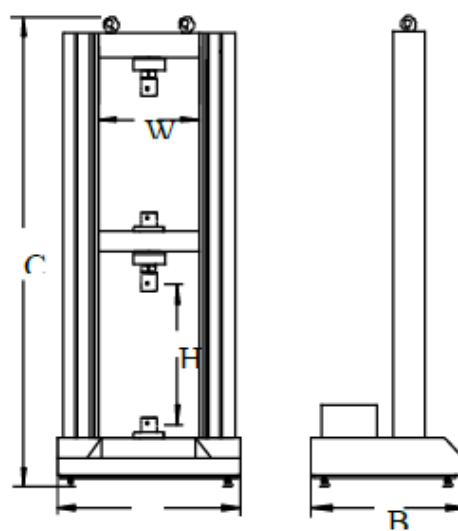
Full Scope of Test Accessories

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



Single Test Space



Dual Test Space

Machine Dimensions				
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	77.5x66x174	110	42
Single	300mm Extended	77.5x66x204	140	42
Double	Standard	77.5x66x180	100	42
Double	300mm Extended	77.5x66x210	130	42

Adapter

- 20kN, 30kN: Φ 20mm
- 50kN: Φ 40mm



Pin

- 20kN, 30kN: Φ 10mm
- 50kN: Φ 18mm

NG-EML Class C	
Model	EML203, EML303, EML503
Class	Class C
Capacity	20kN,30kN,50kN
Calibration standard	ISO 7500, Class 1 / Class 0.5
Force range	0.2% - 100%FS / 0.4 - 100%FS
Force accuracy	\pm 1.0% / \pm 0.5% of reading
Force resolution	1/500,000 FS
Position accuracy	\pm 0.50% of reading
Position resolution	0.06 μ m
Crosshead speed	0.001 - 500mm/min
Crosshead speed accuracy	within \pm 1.0% / \pm 0.5% of set speed
Crosshead travel	115cm (Can be extended to 145cm)
Test width	16.5-inch / 42cm
Dimension (Width x Depth x Height)	77.5 x 66 x 173(cm) – Single Test Space 77.5 x 66 x 180(cm) – Dual Test Space 30.5 x 26 x 68-inches – Single Test Space 30.5 x 26 x 70.80-inches – Dual Test Space
Power requirements	AC220V \pm 10%, 50/60Hz, 850W
Weight	880 lbs / 400 kg