

TruForce

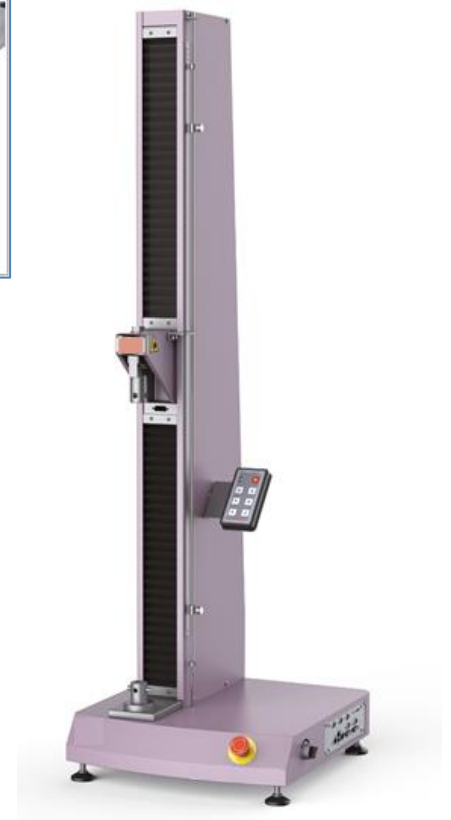
EM Single Column Universal Testing Machine | TF-ETM-A

TruForce TF-ETM -A Series addresses the needs of standardized and routine testing, providing the user high quality at the most affordable price. The single column testing systems are suited for tension and/or compression applications where tests are less than 5 kN and lab space is limited. They are typically used for quality control and production testing.

Typical specimens: plastics, fine wire, fibers and threads, biomaterials, thin films, adhesives, foam, packaging, paper products, consumer products

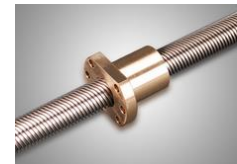
New Features

- Robust linear motion guide increases lateral stiffness and ensure linear crosshead travel. This results in accurate crosshead alignment thus reducing variability in measurement data and producing better overall accuracy
- Imported servo motor with precise planet-gear speed reducer provides higher driving efficiency, low noise and free of maintenance. No need replace lubricates which has longer working life.
- Compact design saves lab space



High Quality at affordable price

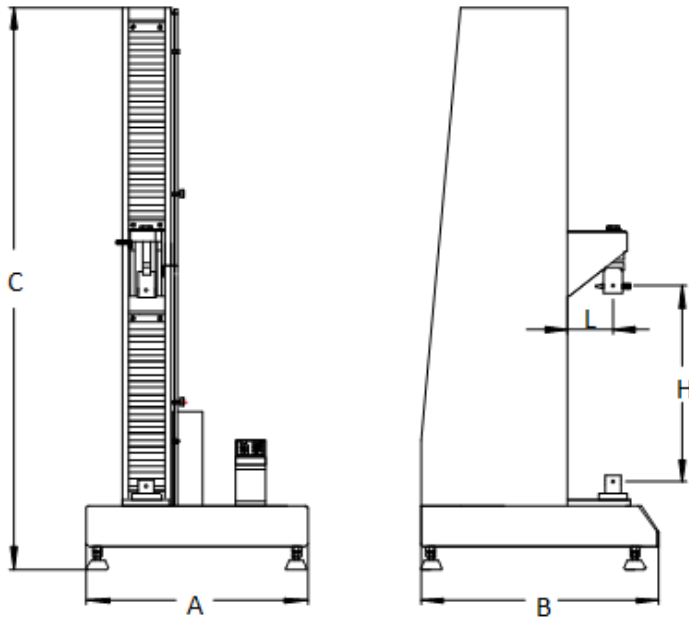
- Pre-loaded ball screws and heavy duty bearings assure long life with zero backlash as well as linear low force and through zero performance. The result is accurate and repeatable measurements that truly represent the specimen characteristics rather than load frame deficiencies
- Fully-protected lead screw covers provide longer life and greater operator protection
- 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
- Full one-year warranty on parts



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
- Exchangeable load cells: 10N~2kN
- Long travel extensometer
- Clip-on extensometer



Machine dimension:

Frame type	Width x Depth x Height A x B x C (mm)	Crosshead travel H (mm)	Front opening space L (mm)	Adapter (mm)	Pin (mm)
Standard	490x530x1590	1000	100	Φ20	Φ10

High Precision Digital Controller

ACS DTC-500 digital controller offers high speed and closed loop control of load, displacement and extension.

- High performance IC, more reliable
- Up to 1200Hz sampling frequency
- Up to 1200Hz closed loop control frequency
- 20bit resolution
- 16 digital input/output port
- Built-in port for PC communication
- Expandable ports
- Load protection, over-current protection, over-voltage protection, over-speed protect, and over-travel protection.

Remote control with display

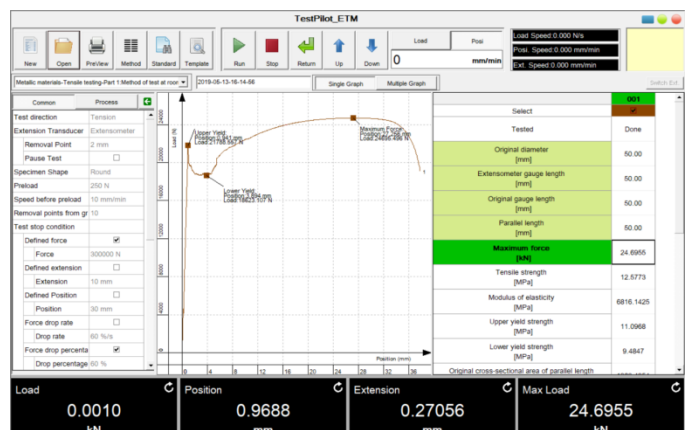
- Ergonomically-designed and easy to operate
- Fine tuning knob
- Test start and stop operation
- Crosshead moving up, down, jog up, jog down
- Display of measurement channel: force, displacement, extension and etc.
- Test status display
- Specimen protection function



Intuitive TruTest Software

This software features a large, growing host of 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. Selected by an operator at runtime, these methods are crafted to meet the specific test flow, analysis and reporting requirements of industry standards across a range of specimen and test types. Pre-packaged test methods are available in a wide selection of bundled sets, including: Polymers & Plastics, Metals, Construction Materials, Biomedical Products, Paper Products, Adhesives, foam, textiles and more.

- Versatile, easy-to-use TestPilot software with a large and growing library of standards-compliant test methods (ASTM, ISO, DIN, EN, BS, and more)
- Modular design permits easy upgrading
- Plenty of test standards are built in the library of the software for routine tests.
- User configured report: user can preset report template and include necessary information, like company information, statistics, and etc. Test report can export to Excel or Word.
- Powerful graphic function: real time display curves, like displacement-load, stress-strain, displacement-time, load-times, and others
- Powerful analysis function can calculate typical value and display on the curve, like Fm, ReL, ReH, Rp.
- Intuitive expression for easy programming of testing standards and testing process



Specifications:

Model	TA-ETM503A
Type	Type A, single column
Capacity	50N, 100N, 200N, 500N, 1kN, 2kN, 5kN
Calibration standard	ISO 7500, Class 1 / Class 0.5
Force range	0.2% ~ 100%FS / 0.4% ~ 100%FS
Force accuracy	±1% / 0.5% of reading
Force resolution	1/500000FS
Position accuracy	0.5% of reading
Position resolution	0.046µm
Crosshead speed	0.001 ~ 500mm/min
Crosshead speed accuracy	±1.0% / ±0.5% of set speed
Crosshead travel	1000mm
Dimension	530mm×490mm×1290mm (1590mm for 1000mm crosshead travel)
Power requirements	AC240V±10%, 50/60Hz
Weight	90kg

Shipping information:

Name	Standard frame
Package	Wooden case free of fumigation
Crated dimension (Width x Depth x Height)	1050x750*1850mm
Crated weight	130kg