

**QC-505M2F (50kN)**

**UNIVERSAL MATERIALS TESTING MACHINE**

**Standard**

ISO 7500-1, ASTM E4 , ASTM D-76, DIN5122 , JIS B7721/B7733 , EN 1002-2, BS1610,GB T228

**Description**

QC-505M2F has large test space and long stroke, the maximum test capacity is 50 kN. Maintenance-free transmission mechanism to reduce machine maintenance problems and in the same time it provides a quiet test environment and high-precision test results.

The machine has single-separated electric control box, separate electronic control system to avoid interference with the transmission components to increase test stability and also conducive to the maintenance and updating of electronic systems.

Support precision jog wheel can be fine tuning machine movement, with precision positioning and accurate calibration to increase test accuracy.

High-speed signal feedback mechanism can reduce the chance of machine overload. The reserved external signal can be connected to an external signal source, increasing machine control mode.

**Industry**

Rubber, Plastic, Paper, Textile, Metal, Wood, Tape, Electron, Package, Medical, Architecture

**Appearance**



## Specification

Model	QC-505M2F
Max. Capacity	50kN
Units	Force: gf, kgf, lbf, N, kN, ozf, tonf(SI), ton(long), tonf(short) Pressure: Kpa, Mpa, psi, bar, mm-Aq, mm-Hg
Force Resolution	31 bits
Force Precision	1/100,000
Test stroke(w/o grip)	1100mm
Stroke resolution	0.0001mm
Space between columns	420 mm
Speed range	0.0002 ~ 600 mm/min adjustable ( Set up by computerized )
Speed accuracy	High speed mode
	0.05 ~ 600mm/min
	Low speed mode
	0.0002~2 mm/min
PC-Port	RJ45(TCP/IP)(Connect software optional)
Data sampling rate	1200Hz (Max.)
Hardware safety protection	upper limit, lower limit, emergency stop button
Motor type	Servo Motor
Feature	<ul style="list-style-type: none"> <li>※Automatic reading of load cell feature information</li> <li>※Automatic reading of displacement sensor feature information</li> <li>※force display, displacement display, time display, stress display and strain display</li> <li>※External analog input (2-channel simultaneous reading of voltage or current)</li> <li>※Test force automatically zero</li> <li>※Test force self-defined calibration</li> <li>※Break detection</li> <li>※Automatic return</li> <li>※Force overload protection</li> </ul>
Power Supply	Single phase 200V -240 V, 8A
Dimension of Machine	105 x 60 x 195 cm
Weight of Machine	360kgf

## Optional Accessory

### (1) Grip & Load Cell

Each test will require different test grips and accessories for the plastics, metal, biomedical, composite, elastomer, component, automotive, aerospace, textile and other applications industries.

- ★Tensile grip
- ★Compression grip
- ★Bending grip
- ★Peeling/Tearing grip
- ★Film friction grip
- ★Load cell



### (2) Displayer

1. Adopted with 7- inch of TFT Color touch screen
2. Chinese, English, Japanese, Three different languages can be selected.
3. Data Display: Force, Stress, Torque, Displacement, Time
4. Test setting, can set test speed, test direction, automatic position return, breaking point machine stop.
5. Data analysis, can read the maximum force, internal force, breaking point force and so on.
6. Can be stand-alone calibration.
7. Various machine shutdown conditions setting (force, displacement, time, elongation).
8. Can be restored to the original factory state.
9. Unit selection can be Metric unit, Imperial units
10. Over-travel, overload protection and overtime machine stop
11. Can store up to 50 data, USB storage data function.
12. Support multiple sets of signal sources.



### (3) Extensometer

QC-557 Short extensometer which is applied in under 50% of elongation test. QC-551 Long extensometer which is applied in over 20% of elongation test.



### Software function

1. Data sample rate faster can be set up to 1200 Hz
2. Operation method: By keyboard and mouse control test, can also through up and down button to adjust the fixture position
3. Compatible with Window 7 /8 system
4. Software has multi-languages with Chinese, English, Japanese, Korean and Spanish display
5. Operating mode: TCP / IP interface, two-way transmission, the computer directly control the machine action
6. Can import multiple test data display simultaneously.
7. Unit selection can be Metric unit and Imperial units.
8. Form flexibility, self-planning information analysis.
9. Data name can be self-set and can self-defined formula
10. Test Screen can be selected data display, graphic display or simultaneous display
11. Data processing: store, call, list, statistical comparison, etc.

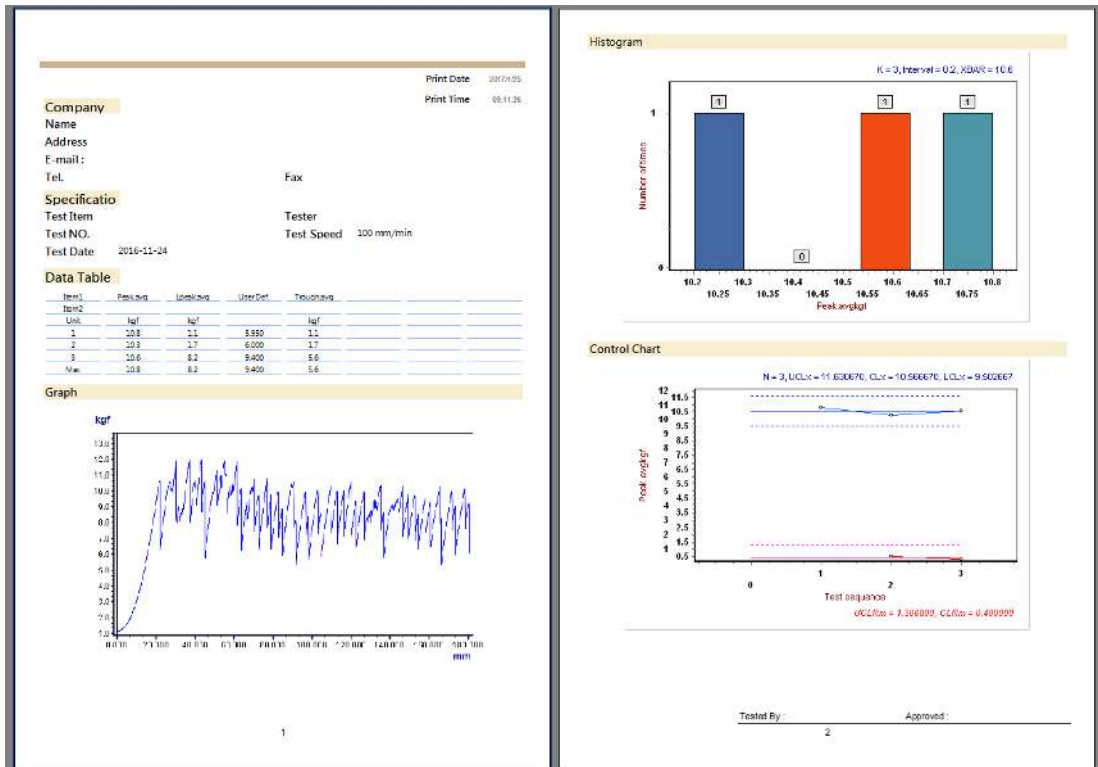
12. Graph X-Y axis physical quantity adjustment, graph-specific mark, interval mark, slope and son on.
13. Test tensile, compression, bending, peeling, spring, creep and other tests
14. Software protection: Overload, over -displacement, over-time protection
15. Variety of test actions, ex. reciprocation, creep, hold tensile (compression), test pause, slip test, etc.
16. Modularization of specimen setting, providing easy to set specimen.
17. Modularization of test conditions to reduce artificial setting negligence and error.
18. Key data capture, can set the upper and lower limits of test data specifications
19. Support multiple sets of I / O signals, increase testing mechanism

## Software

### Software interface



## Report



\*Cometech reserves ultimate modification right of product specification.

1<sup>st</sup> version,2017

