



TT 6000 X / 021N

## SERVOTEC FULLY AUTOMATIC UNIVERSAL TESTING MACHINE 5kN (SINGLE COLUMN, DESK TOP VERSION)

Standard: BS EN 10002-1, ISO 7500-1, ASTM A370

### Tensile & Compression

TT Servotec Fully Automatic Universal Testing Machine out tester adopts DC speed regulating servomotor & reduction gears as the power source. Its real time displays test data & test status with LCD module. Professional designed servo control system realizes the PWM pulse width modulation control mode. It really comes up to with test speed closed loop control mode. It is controlled by single chip automatically control.

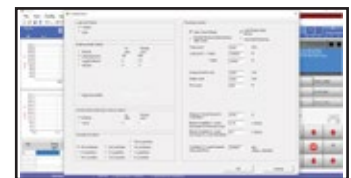
### Main Use & Range

Used for measurement & test of mechanical property & analytical study of metal, non-metal & composite material, such as aviation, petrochemical, machinery manufacture, wire, cable, textile, fibre, plastic, rubber, ceramic, food, medicine packaging, aluminium plastic tube, plastic door & window, geo-textile, film, wood, paper, metal material & manufacture industry & etc.

It can record the max. test force, fracture value, yield value, max. compression value automatically. It can also calculate the fracture extension & all kind of strength value manually. The RA232 connector can do the function of communicating with computer to do the data work. It is an essential equipment for manufacture, construction unit, product quality supervision & inspection bureau & building material test department. It also could be used in the university for teaching purpose.



Test Curve Page



User Setting Page



Test Result Page

### Features:-

#### Testable Items

General test item:

(General display value and calculated value)

- Tensile stress
- Tensile strength
- Pulling strength
- Stable tensile stress
- Constant stress force value
- Tear off the elongation
- Constant stress elongation

- Tear strength
- Any point force value
- Any point elongation
- Extraction
- Computation of adhesion and peak value
- Pressure test
- Bending test
- Adhesive force stripping force test
- Extraction force piercing force test
- Cycle test

### Main Technical Parameter :

| Model Number                  | TT 6000 X / 021N   |
|-------------------------------|--|
| Max Test Force                | 5kN  |
| Structure Type                | Single Rigid Column with Single High Precision Ball Screw (Desk Top Version)   |
| Traveling Space               | 950 mm (exclude fixtures)  |
| Width Space                   | 350 mm   |
| Test Force Accuracy           | ±0.5%  |
| Test Speed Range              | 0.01 - 500 mm/min  |
| Load Resolution               | 1/100 000  |
| Displacement Resolution       | 1/1000   |
| Displacement Accuracy         | ≤0.5%  |
| Resolution of Metal Extenders | 1/1000   |
| Accuracy of Metal Extenders   | ≤0.5%  |
| Accuracy of Extenders         | ±1 mm  |
| Measuring Range               | 0.5% - 100% Full Scale   |
| Load Unit                     | Gf, kgf, N, kN, Lbf, etc.  |
| Curve Display                 | <p><b>Selectable Axial Parameters:</b></p> <p>Y-axis - time, load, displacement, deformation, stress, strain.</p> <p>X-axis - time, load, displacement, deformation, stress, strain.</p> |
| Data Display                  | Max. Force, Speed, Specimen Detail, Strength (Kpa, Mpa, N/mm, Nmm)   |
| Main Drive Unit               | Precision Servo Drive & Servo Motor  |
| Safety Feature                | Emergency Stop, Overload Protection, Upper & Lower Limit Switch  |
|                               | Load Sensor with Auto Retreat  |
| Power Source                  | 220 ~ 240 V, 400 W, 7.5 A, 1 Ph, 50 / 60 Hz  |
| Dimension                     | 620(L) x 405(W) x 1360(H) mm   |
| Approx Weight                 | 120 kg   |

### Unit Consists Of :

| Model Number | Parts Description                                   | Qty     |
|--------------|---|---------|
| TT LC – 5kNS | 5kN High Precision Load Cell<br>(S Type)            | 1 Unit. |
| TT 6ST – G01 | Mechanical Rubber Clamp                             | 1 Unit. |
| TT 6ST – HC1 | Handheld Magnetic Control Unit                      | 1 Unit. |
| TT 6ST – PC1 | Desktop Computer Unit c/w<br>Operation and Software | 1 Unit. |

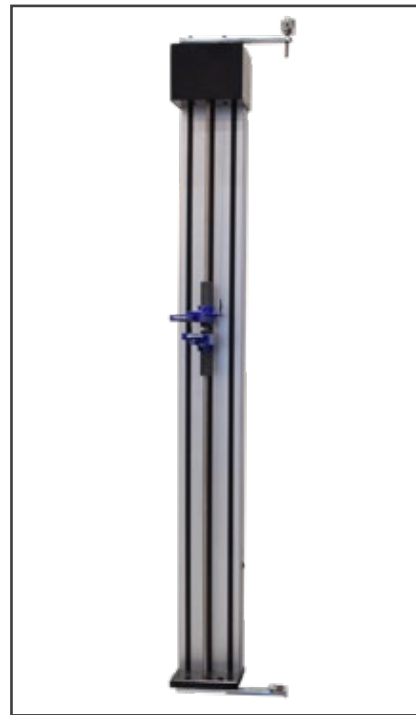
\*1 Copy of Manual Instruction

### Optional Accessories :

| Model Number    | Parts Description                           | Qty    |
|-----------------|---|--------|
| TT CDT1         | Console Desk T1                             | 1 Set. |
| TT 6ST – CTS    | Cycle Test Software                         | 1 No.  |
| TT AEX – 25/10  | Axial Electronic Extensometer (GL25/D10)    | 1 No.  |
| TT AEX – 50/25  | Axial Electronic Extensometer (GL50/D25)    | 1 No.  |
| TT AEX – 100/25 | Axial Electronic Extensometer (GL100/D25)   | 1 No.  |
| TT 6ST – LTX-1  | Long Travel Electronic Extensometer (LTX-1) | 1 No.  |
| TT CP – 200     | Computer Printer                            | 1 No.  |
| TT 6ST – PBU    | Portable Bench Unit                         | 1 No.  |



Axial Electronic Extensometer



Long Travel Electronic Extensometer



Desktop Computer Unit



Computer Printer