Computer Control Hydraulic Servo Universal Testing Machine

Model: WAW-D Series

1, General introduction

United Test make Universal Testing Machines are known for their long lasting trouble-free performance and highest quality material used in the manufacturing process. The Hydraulic universal testing machine can perform tension, compression, flexure/bending and shearing test for kinds of specimens. Suitable for metal and nonmetal material, such as iron, steel, steel bar, rebar, cement, concrete, rod and so on.

Specially design for production, research, student training and industrial laboratory. Available in wide range of loadframe capacities (300kN to 2000kN)/(10Ton to 200Ton) and with combination of control panels (Digital, Computerised) makes United Test product range suitable for every customer requirement. Load weighing system meets or exceeds the requirements of the following standards: ASTM E4, EN10002-2, BS 1610, DIN 51221, ISO 7500-1.

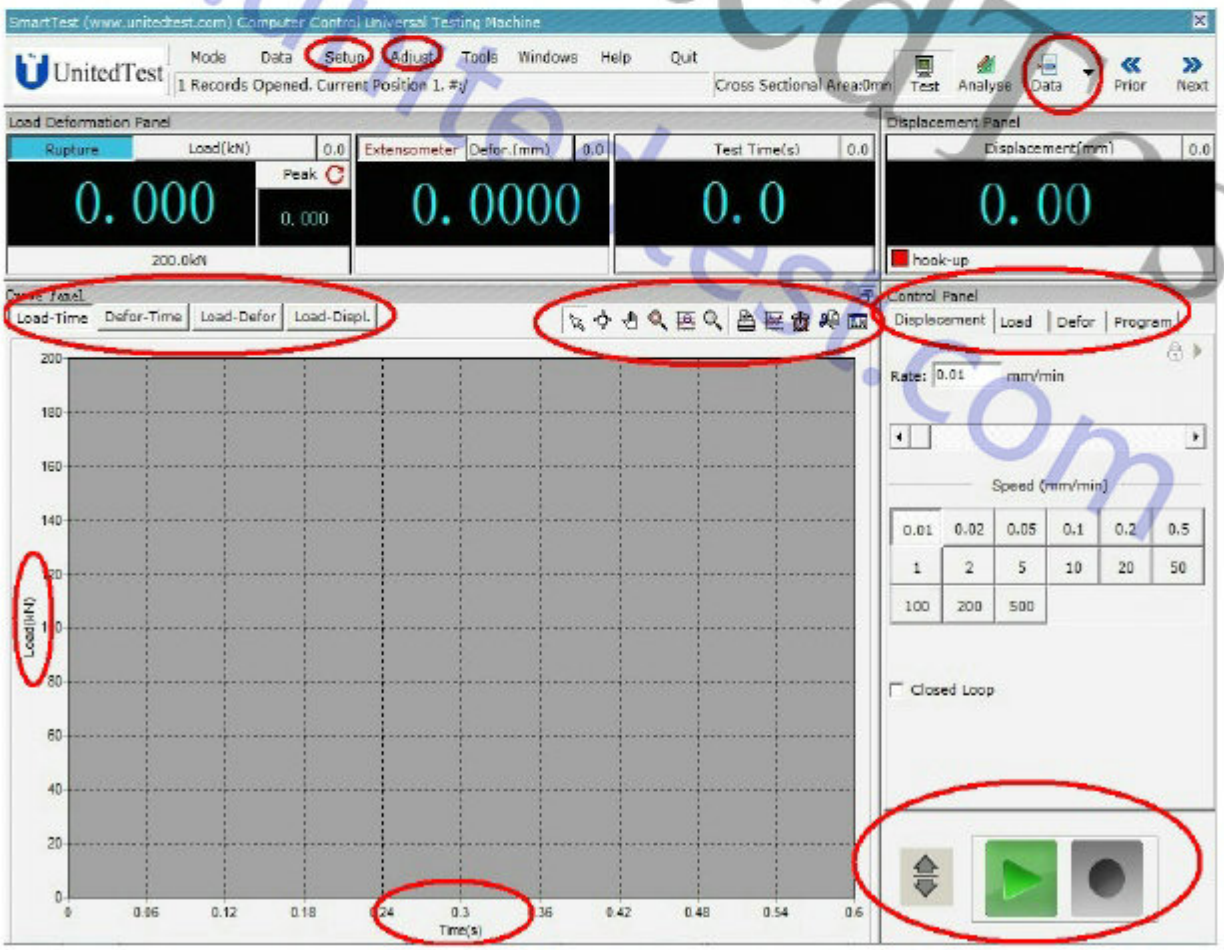
2, Application

Widely used for industrial application, factory quality control, science and research institute, QC &QA college student training, education institute, testing and inspection center, laboratories, construction company, aerospace, mechanical production, electric appliance fields.

3, Key Features

1), Computer controlled hydraulic servo operate loading model, double working space, tensile test at upside of crosshead, compression and bending test between working bench and crosshead;
2), It adopts the hydraulic pressure to drive the cylinder, so loading on the specimen to perform the test. Hydraulic station supplies super and stable pressure to the system; the soundproof insulation can reduce the noise level of the power pack to 75 dB (A), with lower noise, tiny energy consuming and lower heat.
3), Unique screw gap eliminating structure can guarantee the continuity of the test;
Total six columns structure, four column and two leading screw to make the machine more stable and life long working.
4), Independent hydraulic clamping structure can guarantee the reliability of the system; it will not hurt person for falling specimen and ensure the safety of operator;
5), Limitation and electrical protection system can ensure the security of using;
6), The load frame adopts oil cylinder bottom type structure, hydraulic load, hydraulic clamping specimen;
7), Servo valve can control the speed arbitrarily through the software. It can carry out loading, unloading and oil quick feedback function (i.e. the cylinder come back to its original position after the test);
8), Crosshead (the middle beam) movement is by mean of motor, chain at the bottom of loadframe, driven leading screw to make crosshead up and down.

4, Software



5, Main technical specification

Model	WAW-300D	WAW-600D	WAW-1000D	WAW-2000D
Max. load	300KN	600KN	1000KN	2000KN
Column Number	4 column and 2 leading screw, total 6 columns			
Measuring force range	2%~100%			
Accuracy of load	±1% of indicated value			
Accuracy of deformation	±0.5%, resolution: 0.01mm			
Constant load, displacement, deformation control Range	0.4%~100%FS			
Deformation rate control accuracy	Rate<0.05%FS,accuracy ±2.0% Rate≥0.05%FS, accuracy ±0.5%			
Deformation measuring	Clip-on extensometer, standard gauge 50mm, extension 5/10/25mm			
Max. tensile space	700mm	700mm	800mm	900mm
Max. compression space	600mm	600mm	700mm	800mm
Flat specimen range	0~15mm	0~30mm	0~40mm	0~60mm
Round specimen range	φ10~φ32mm	φ13~φ40mm	φ13~φ60mm	φ15~φ70mm
Compression platen dia.	200*200mm	200*200mm	200*200mm	204*204mm
Bending support roller distance	350 mm	350 mm	350 mm	450 mm
Bending roller width	100mm	140mm	140mm	140mm
Bending roller dia.	30mm	30mm	30mm	50mm
Piston stroke	250mm	250mm	250mm	250mm
Max. piston speed	100mm/min	100mm/min	100mm/min	60mm/min
Clamping mode	Hydraulic automatic			
Dim. of frame	910*550*2370mm		960*650*2600mm	1160*1100*2600mm
Dim. of control box	1100×700×950mm			
Weight	2600kg	2600kg	3900kg	8500kg
Standard Accessories	Load frame, servo oil source, control box, servo valve, Japan Nachi Pump; oil pressure sensor **(Load cell is optional)** , liner displacement sensor, tensile test Jaws, compression platen, bending test accessory, PC, printer, Professional software, tools, anchor bolts, operation manual			