

## Computer Controlled Hydraulic Servo CTM

### Model: YAW-300



**Model: YAW-300**

#### 1, General introduction

YAW series Hydraulic Compression Strength Testing Machine to test cement, brick and concrete is offered by United Test. Use hydraulic power driving, hydraulic servo control technology, computer to collect and process data, close loop test with high accuracy for various test materials. Consist of frame, oil source, control system, test fixture. Accuracy class 1, max. test load 300KN.

#### 2, Key Features

2.1, The tester mainly consist oil cylinder, piston, load cell, compression platen, columns, upper crosshead, oil tank, valve manifold group, controller etc.,

2.2, Use load cell to measure the force, with high accuracy and good stability, repeatability.



**Load cell for measure force**

2.3, Column surface chrome coating, rust protect and more beautiful appearance.

2.4, Running noise lower than 60dB.

2.5, Industry computer, easy operation and solid panel (class IP65), anti-shock, rustproof etc., function.



**Industry computer**

2.6, Special design oil system pressure less than 25Mpa, ensure the security and enlarge the working life.

2.7, Measuring and control system include digital servo valve, high accuracy load cell, controller, software, with high stability. Meet the test requirement for cement, concrete of various standard. Function of load close loop control; realize consistent speed control or consistent load control. Computer automatic complete the test, automatic calculate the test result, and print test report.

2.8, Key part like upper and lower-compression platen, columns, position pin hardness above 55HRC. Surface hard chrome coating ensure the surface smooth and clean, with high anti-abrasion ability and low noise. Can work long life without lubricant oil

### 3, Main technical specification

<b>Model</b>	<b>YAW-300</b>
<b>Max. load</b>	300KN
<b>Accuracy of testing force</b>	±1% of indicated value
<b>Max. compress test space</b>	180mm
<b>Upper Compression platen dia.</b>	(Fixed type plate) Φ108mm
<b>Upper Compression platen dia.</b>	(Cardan joint type) Φ170mm
<b>Lower Compression platen dia.</b>	Φ205mm
<b>Piston stroke</b>	80mm
<b>Power supply</b>	220V, 50HZ, 1 phase
<b>Dimension</b>	930×550×1400mm
<b>Weight</b>	450Kg
<b>Power</b>	0.75kW (Pump power 0.55 kW)
<b>Standard Accessories</b>	Loadframe, computer, English compression test software, load cell, compression platen, Safety net cover, English operation manual

## Computer Controlled Hydraulic Servo CTM

### Model: YAW-300B



**Model: YAW-300B**

#### 1, General introduction

YAW Series Hydraulic Compression Strength Testing Machine to test cement, brick and concrete is offered by United Test. Use hydraulic power driving, hydraulic servo control technology, computer to collect and process data, close loop test with high accuracy for various test materials. Consist of frame, oil source, control system, test fixture. Accuracy class 1, max. test load 300KN.

#### 2, Key Features

- 2.1, The tester mainly consist oil cylinder (separate for Compression & Flexural), piston(separate for Compression & Flexural), load cell(separate for Compression & Flexural), compression platen, Flexural test fixture, columns, upper crosshead, oil tank, valve manifold group, controller etc.,
- 2.2, Use load cell to measure the force, with high accuracy and good stability, repeatability.



**Load cell for measure force**

2.3, Column surface chrome coating, rust protect and more beautiful appearance.

2.4, Running noise lower than 60dB.

2.5, Industry computer, easy operation and solid panel (class IP65), anti-shock, rustproof etc., function.



### Industry computer

2.6, Special design oil system pressure less than 25Mpa, ensure the security and enlarge the working life.

2.7, Measuring and control system include digital servo valve, high accuracy load cell, controller, software, with high stability. Meet the test requirement for cement, concrete of various standard. Function of load close loop control; realize consistent speed control or consistent load control. Computer automatic complete the test, automatic calculate the test result, and print test report.

2.8, Key part like upper and lower compression platen, columns, position pin hardness above 55HRC. Surface hard chrome coating ensure the surface smooth and clean, with high anti-abrasion ability and low noise. Can work long life without lubricant oil.

### 3, Main technical specification

Model	YAW-300B	
Test type	Compression test	Flexural (bending) test
Max. load	300KN	10KN
Accuracy of testing force	±1% of indicated value	
Max. compress test space	180mm	180mm
Upper Compression platen dia.	(Fixed type plate) Φ108mm	(Fixed type plate) Φ60mm
Upper Compression platen dia.	(Cardan joint type) Φ170mm	/
Lower Compression platen dia.	Φ205mm	/
Piston stroke	80mm	60mm
Power supply	220V, 50HZ, 1 phase	
Dimension	1150×500×1400mm	
Weight	500Kg	
Power	0.75kW (Pump power 0.55 kW)	
Standard Accessories	Loadframe, computer, English compression test software, load cell, compression platen, flexural test fixture, safety net cover, English operation manual	

## **Hydraulic Concrete Compression Testing Machine**

**Model: YAW-2000/3000** (Fixed test space, cushion block to adjust the test space)



**Model: YAW-2000/YAW-3000**

### 1, General introduction

YAW series Compressive Strength Testing Equipment to test cement, brick and concrete is offered by United Test. Range 1000KN, 2000KN, and 3000KN, these strength testing equipment are extremely handy and are easy to use for testing cement, concrete and mortar cubes. We lay utmost importance on equipment design and construct with emphasis on ease of operation.

Conform with test standard ASTM C39, this test method consists of applying a compressive axial load to molded cylinders or cores at a rate which is within a prescribed range until failure occurs. The compressive strength of the specimen is calculated by dividing the maximum load attained during the test by the cross-sectional area of the specimen.

**ASTM C39** "Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens"  
**GB/T 17671, GB/T 50081, GB/T2611, GB/T16826 etc.,**

### 3, Key Features

3.1, The tester is four columns structure, mainframe consist of bottom base, oil cylinder, load cell, compression platen, columns, upper crosshead etc., high stiffness ensure the test process stable.

3.2, Use load cell to measure the force, with high accuracy and good stability, repeatability.



**Load cell for measure force**

- 3.3, Fixed test space, use the cushion block to adjust the test space, make the upper crosshead simple structure, no leading screw, no malfunction.
- 3.4, Column surface chrome coating, rust protect and more beautiful appearance.
- 3.4, Running noise lower than 60dB.
- 3.5, Industry computer, easy operation and solid panel (class IP65), anti-shock, rustproof etc., function.



**Industry computer**



- 3.6, Unitary oil source cabinet, consist of hydraulic pump, oil control & measuring system, computer etc., internal radial plunger pump output stable and low noise. High integration oil source cabinet, easy operation and observation.
- 3.7, Measuring and control system include digital servo valve, high accuracy load cell, controller, software, with high stability. Meet the test requirement for cement, concrete of various standard. Function of load close loop control; realize consistent speed control or consistent load control. Computer automatic complete the test, automatic calculate the test result, and print test report.
- 3.8, Key part like upper and lower compression platen, columns, position pin hardness above 55HRC. Surface hard chrome coating ensure the surface smooth and clean, with high anti-abrasion ability and low noise. Can work long life without lubricant oil.

#### 4, Main technical specification

Model	YAW-2000	YAW-3000
Max. load	2000KN	3000KN
Accuracy of testing force	±1% of indicated value	
Load resolution	0.01kN	
Frame structure	4 columns frame	
Upper compression platen dia.	Φ300mm	
Piston moving speed	0-60mm/min	
Distance between two platens	360mm	
Columns effective intervals	400×320mm	
Piston stroke	200mm	
Power supply	220V, 50HZ, 1 phase	
Dimension of frame	640×560×1500mm	700×580×1650mm
Dimension of oil source cabinet	700×540×1500mm	
Weight	1500Kg	2100Kg
Standard Accessories	Loadframe, load cell, industry computer, compression platen, close loop controller, Software, unitary oil source cabinet, English operation manual	