

## HST-YAW300G Cement Compression & Flexural Testing Machine



### 1. Application

The testing machine tests the mechanical properties of cement, mortar, brick, concrete and other building materials with servo motor acceleration and deceleration control technology, showing the load value, loading speed and loading curve. The test data is automatically processed, stored, and printed.

### 2. Standards:

ISO 679, DIN 1164: Cement -- Test methods -- Determination of strength;

ASTM C348: Standard Test Method for Flexural Strength of Hydraulic Cement Mortars;

ASTM C349: Standard Test Method for Compressive Strength of Hydraulic-Cement Mortars (Using Portions of Prisms Broken in Flexure);

ASTM C109 / C109M: Standard Test Method for Compressive Strength of Hydraulic Cement Mortars;

BS EN 196-1: Methods of testing cement. Determination of strength;

ASTM C880 / C880M: Standard Test Method for Flexural Strength of Dimension Stone;

ASTM C170 / C170M: Standard Test Method for Compressive Strength of Dimension Stone;

EN12390-5 BS 1881:118, ASTM C78, C293, ASHTO T97: Testing hardened concrete. Flexural strength of test specimens.

### 3. Features and Function:

- 3.1 Closed-loop control system constantly monitors the test in progress and regulates the testing rate to maintain prescribed conditions.
- 3.2 Compact design requires less room in the lab and oil free drive system not only keep the lab clean but also low noisy.
- 3.3 Stable and reliable high intensity structure load frame with extended tabletop provides extra area for placement of additional jigs.
- 3.4 Real time display software ensures the accurate track of testing process.
- 3.5 Pre-built test methods for cement mortar, concrete prism, dimension stone and user configurable test methods are available.
- 3.6 Overload and over travel protection available for secure operator and machine.
- 3.7 Custom report template available.
- 3.8 Easily expand test solutions at a later date with hardware and software options.



#### 4. Main Technical Parameters

| MODEL                                  | HST-YAW300G                                |
|----------------------------------------|--------------------------------------------|
| Control and deal mode                  | Computer constant control and auto dealing |
| Maximum compression force              | 300KN                                      |
| Maximum flexural force                 | 10KN                                       |
| Test Accuracy                          | Grade 1                                    |
| Load test Range                        | 2%-100% of FS                              |
| Displacement indicate error            | ±1%                                        |
| Displacement resolution                | 0.01mm                                     |
| Displacement speed adjust              | 0.01~40mm/min                              |
| Stress rate control range              | 0.05 ~ 10KN/S                              |
| Max. distance between Compression      | 200mm                                      |
| Upper and low Compression platens size | Φ280mm                                     |
| Compression travel                     | 80mm                                       |
| Column clearance                       | 210mm                                      |
| Power                                  | Single phase 220 V (110 V), 50-60 Hz       |
| Dimensions                             | 570*410*1340mm                             |

