

## Wizard Auto 500/15 KN- Automatic Compression/Flexural Testing Machines



### Description:

#### Main features include:

- Rigid welded steel construction
- Accuracy Class A starting from 10% of full scale (from 1% on request)
- Two channels for load sensors
- Wide graphic display 128 x 80 pixel
- Graphic printer available as option
- AC motor fitted with VFD INVERTER device: high efficiency, low consumption, silent operation
- Dual stage pump for fast approach and automatic switch to high pressure for loading

#### Frame

Rigid welded steel construction. Spherical seat allows free alignment at the initial contact with the specimen.

#### Safety features

Includes: Max. Pressure valve to avoid machine overloading; piston travel limit switch; emergency stop button; front and rear transparent flexible fragment guard.

#### Features:

**WIZARD AUTO is CONTROLS new standard automatic Quality Control machine for compression and flexural testing and includes many new features and enhancements to improve the user-friendliness, efficiency, Operator comfort and energy savings.**

QC testing performance has just taken a step change improvement with CONTROLS abandoning manual test control and now features automatic closed-loop PID control of loading-rate using VFD inverter-technology control of the high specification AC motor.

Wizard Auto automatically and accurately performs tests at the correct test speed, ensuring compliance to Standards and with no effect due to operator variables.

Mainly dedicated to routine failure tests (compression, flexure and indirect tensile), WIZARD AUTO is the perfect solution to ensure total certainty of testing accuracy and strict conformity to international Standards. In fact being an automatic system it allows:

- **Reduced opportunities for operator errors**, improving accuracy of results and repeatability
- **Easy-to-use:** even for operators with limited expertise.
- **Conforming to Standards:** the machine automatically performs the test at correct test speed. Conformance to Standards can be easily proven.
- **High performance:** high speed pump closes the daylight above the specimen at the fasted speed allowing a very high throughput of tests.
- **Operator comfort** due to the significant noise reduction.
- **Energy saving**, with 50% reduction in energy consumption.

#### Standards:

- IS: 516
- AASHTO T22
- ASTM C39

#### Specifications:

### WIZARD AUTO AUTOMATIC POWER AND CONTROL SYSTEM

#### Hydraulics

- Max pressure 700 bar
- Power 750 W
- Dual stage pump: low pressure/high delivery for fast piston approach and high pressure/low delivery for loading.
- AC motor fitted with VFD inverter device featuring high efficiency, reduction of power consumption and silent operation.

#### Hardware

- Two 16 bit analog channels for load sensors
- Wide graphic display 128 x 80 pixel
- Sampling rate 50 Hz
- Internal memory
- RS 232 port for data download (including load/time graph points) to PC in ASCII format
- Integrated printer as optional.

#### Firmware

- Real time display of load and stress
- Automatic application of the selected load rate Execution of loading ramps with the possibility to manually increase or decrease the test speed during the test
- Peak detection and saving
- Language selection
- Multi-coefficient linearization of the calibration curve for better accuracy at low loads
- Multiple units: Lbf / Ton / kN.

#### Frame

Capacity (KN)	500 KN compression Frame 15 KN Flexural frame
Vertical daylight (mm)	300/205
Horizontal daylight (mm)	275
Platen (mm)	165 dia X 30
Ram Travel (mm)	50/30
Pressure transducer bar	700

4 x 50x 200 mm,

Distance piece

1 x 35x 200 mm,

2 X 25 x 200mm

Weight (kg)

500 approx

**Products:**

**CT050/0015-WIZARD AUTO**

"PILOT Automatic Compact-Line double chamber hydraulic frame 500/15 KN cap for testing cement mortar and other material.

230 V, 50-60 Hz, 1 ph."

Compression platens: 165mm diameter

Load measurement: high accuracy load cells for 15 KN frame and pressure transducer for 500KN frame (Included)