

## Fully Automatic Concrete Compression Machine , 1200KN

This machine is designed and produced to determine compression, split and flexural strength. Welded steel frame of machine designed by CANTROL features heavy duty, rigid, distortion-resistant frame to meet or exceed recommendation for rigidity of ACI 368 and ASTM C39. All electrical and electronic parts and their safety wiring can be passed the CSA and UL standards requirements.

**Model: 2412011 and 212012**

### This machine consist of:

- 1- Capacity:2000KN, 0.1KN ( 450Klbf) accuracy. used for up to200\*200 cube and 6"\*12"concrete cylinder.
- 2- TFT, Full Color, 7" Touch Screen , UL Approved made by Fatek Co.
- 3- Electronic Hardware: all PLC`s made by FATEK Co, UL Approved.
- 4- User friendly software designed by CANTROL.
- 4 Selectable standard Engineering units, N, Lbf, Kg
- 5- Servo-controlled uniform adjustable and preset Pace Rate ( 1KN-30KN/Sec), volume of hydraulic (cm<sup>3</sup>/sec) is controlled by software (max fluctuation of pace rate will be +-5%, instead of motor driven pace rate control that is not more stable to control, specially in lower pace rates (+-15%).
- 6- Able to select as ASTM standard pace rate automatically or non-standard pace rate.
- 7- RS232 Serial port to communicate with PC, Cable is included.
- 8- Able to take screen shot which can be save with USB Port.
- 9- Able to save all data in history by USB Port.
- 10- Overload can be set up to 2000KN, and controlled by software for safety.
- 11- Ten set-point calibration method by software which is more accurate than one set point.
- 12- Able to calculate compression strength based on sample dimension and save the data in internal memory and USB forup to 500 tests.
- 13- Able to draw force - time and strength- time in EXCEL format in PC.( software is included).
- 14- Front and rear fragment plexi glass guard doors (8mm thickness) with door`s locking switch to cut off main when doors are open. Can be dismissed by door button on display.
- 15- Power Pack: Dual, low and high pressure axial piston pump( plungers made by Bosch Co. , (600 bar), 18 liter capacity oil hydraulic tank, with oil level indicator.
- 16- 600 bar high quality and accurate S.Steel Pressure Transmitter, made by WIKA, Germany.
- 17- Piston stroke is 50mm, protected by micro-switch for over limitation of piston stroke.
- 18- Piston hardened and grinded for longer service life, PTFE sealed and guided in cylinder.
- 19-Upper and lower platens which are hardened(55Rc or more) and grinded surfaces for longer service life., Dia 165mm (6.5") and 215mm(8.5").
- 20- Heavy-duty spherical seat, machined accurately by CNC lath machine, in lubricant grease bath.
- 21-Lower platen has concentric circles for easier centering of specimens meet the standard.
- 22- complete with two steel spacers, set of 2 pcs.
- 23-Heavy Steel Pedestal : for user`s placement of specimens in the frame easily and ergonomically.
- 24- Model 2412011, 110V, 60Hz. Model 2412012, 220V, 50Hz.
- 25- Dimension of stel frame :520\*410\*1250mm and of Console: 700\*390\*1200 mm
- 26- Weight of frame: 410 kg (900Lb), weight of power pack: 60kg,( 132Lb)

#### Standards:

ASTM C39,C78  
C109,C293  
C469,C496  
AASHTO T234-90  
BS 1377:8, 1377:7  
EN 123390-4

