

AQUACONTROL, THE VERSATILE TOUCH SCREEN MOISTURE CONTROLLER WITH THREE MODES OF OPERATION



AquaControl controls the addition of water into your mixer to optimize the moisture slump, ensuring a high quality product while eliminating the frustration and cost associated with wasted batches. AquaControl 1540 touch-screen moisture measurement controller, together with the rugged and accurate AquaMix 2270D moisture sensor, gives you three different methods of concrete moisture measurement control. This allows you to choose the best, most accurate control method for your plant and product. AquaControl uses the same touch screen and PLC hardware as the BatchTron series batch controllers, giving it the reliability and ease of use that you expect from Scale-Tron products.

Consistent moisture, batch after batch

Moisture variations can alter your product's color, workability and strength. AquaControl is the professional solution to this problem.

CONTROL FEATURES

- PLC/touch screen with multi-language graphic user interface is exceptionally reliable as well as easy to learn and use.
- Standard off-the-shelf parts for easy replacements.
- Connection to Internet allows fault diagnosis and software upgrades.
- On-screen setup and calibration adjustment.
- Separate computer software for sensor initial setup and calibration.

THREE MODES OF OPERATION

Three modes of operation are built into AquaControl software, allowing you to choose an operating sequence that is optimized for your types of products as well as your mixer.

- **MasterMix** gives highest speed and greatest mixer output for plants where the mixer is running batches back to back without a break. Handles dry or wet cast equally well. Requires accurate calibration.
- **MicroMix** is lower in cost because it does not require a water meter or scale. It is useful for dry cast mixes, plus some types of SCC, when production speed is not as critical. Does not require accurate calibration, easier to manage. Applicable in lower throughput applications where the mixer usually stands idle between batches.
- **Fast MicroMix** feeds most of the water by meter or scale, then uses MasterMix and does not require accurate calibration. Useful for dry-cast mixes, plus some types of SCC.



AquaControl's touch screen displays the moisture as mixing proceeds, allowing you to see the whole mixing process at a glance. Screen buttons override automatic operations, allowing you to pause or finish the process yourself if necessary.

DIGITAL SIGNAL PROCESSING

The sensor signal first passes through a peak reading stage to eliminate air void effects behind the paddles. Then it is averaged, to eliminate any cyclical variations. Finally, a "low pass filter" smooths the signal, which is fitted into a "window"

based on a minimum time within accuracy limits. When the signal fits the window, your measurement is within your needs for your product.

SYSTEM SPECIFICATIONS

Control PLC:	Omron
Touch Screen:	Omron TFT Colour
Outputs:	120 V relays, contacts rated 2A, 24 VDC or 250 VAC
Inputs:	24 VDC only. Optional relays available for AC operation
Connection to External Batch Controller:	Discrete start/complete handshake plus serial RS232 command line where this is available
Reading Speed:	Over 100 readings per second
Temperature Range:	Operating 0 – 55 °C (32 – 130 °F)
Construction:	Powder coated steel, NEMA-4

Designed and manufactured in North America with instant on-line support.