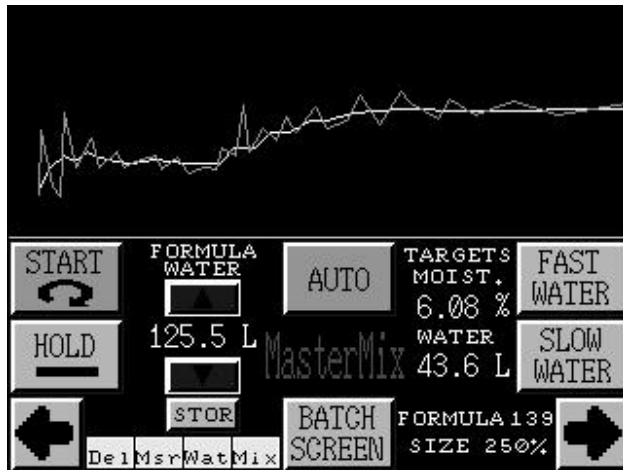


## MixTron II mixer water dosing

### THE ULTIMATE IN CONCRETE MIXER WATER MANAGEMENT

No more long mixing times while the water dribbles in. **MixTron's** microwave moisture sensor measures the dry mix for just long enough, then adds the water faster and with more precision than anything else in the world. Increases batch plant throughput by up to 30% compared with older methods.

- Replaceable NEW SiN ceramic sensor faceplate, the hardest of any, and stainless steel body for longest life. Adjustable mount compensates for mixer wear.
- Water measurement by volumetric meter or weight.
- Two-speed water valves for dosing speed plus accuracy.
- **PLC and touch screen based controller** with graphic screen gives your batch operator a unique "window" on the mixing process. It can run stand-alone but will also communicate with batching computer for better automation and higher accuracy.



It is possible to run two MixTron systems from the single controller, giving a major saving in two and three mixer plants. The single controller connects to a separate sensor in each mixer and a separate set of water valves and meter for each mixer. Each mixer has its own screen pages, menus and data memory, allowing each one to be customized and tuned as if it were a separate box.

Mixtron's screen shows the moisture graphically throughout the mixing cycle, allowing each stage to be monitored. For the first time, the operator is able to see the mixing process in action, allowing him to know when mixing is done and to adjust the mixing parameters properly. Mixer blade wear and adjustment can be clearly seen.

The screen also shows raw and averaged data as an aid during setup.

**MixTron II is the ultimate** in water management for the concrete mixer. **MixTron's microwave technology** is insensitive to temperature and impurities, making it more accurate than the older resistive methods. Measurement starts shortly after the aggregates and cement have been added to the mixer and continues until the computer has acquired a satisfactory average moisture reading.

Realizing that this process is slow, Scale-Tron has re-thought the averaging process, resulting in a faster and more accurate result. From batch data received from the batching computer or stored in its own database, the **water/cement ratio** or **water to total solids ratio** (for dry cast) of the mix is calculated and compared with the target value for the mix design. The difference between these two values allows the required water to be calculated. The water is then metered or weighed into the mixer through fast flow and dribble valves to achieve high speed and a precise cutoff. The mix is released for discharge when the programmable mix time is finished.

**MixTron II goes further than any other system in use today;** it not only takes the formula weights to calculate the water amount - it uses the actual weights of both cement and aggregates to predict the water value, **eliminating the errors** caused by **small batching variations**. The result is accurate moisture all of the time.

**MixTronII's microwave sensor** is highly sensitive to moisture changes in the mixer. Installed in the mixer floor or wall, it measures the material as it is mixed, passing the ever-changing moisture value to the MixTron II controller for measurement and control. The MixTron sensor's faceplate has to endure the harsh abrasion of the aggregates as they mix. Consequently, it uses high-tech Silicon Nitride ceramic, almost diamond hard and extremely tough. Mixtron's faceplate is harder, tougher and thicker than anything else in the industry to guarantee a life far longer than any competitor before it needs to be changed. And when it does require replacement, it can be done on site without special knowledge or tools.



**MixTron II's PLC** and touch screen are fully industrialized components in a sealed wall mounting cabinet, eliminating problems created by fine dust in filtered outside air. Like our BatchTron controllers, MixTron II is extremely reliable; typical life of these components is over 10 years. Communication with the batching system is by serial RS232 link; MixTron II can emulate Ludwig, Hydronix or Lesueur, ensuring full compatibility with your batch controller. It can also operate as a stand-alone system. Control of the water valves and communication with the water meter and other sensors is by internal PLC output relays, available in all standard voltages. All parts are standard off-the-shelf items at electrical distributors.

**MixTron II's software** operates through an advanced touch screen interface. Status indicators tell you what is happening at all stages in the mix cycle, together with the weights of materials obtained from the batching computer. A graph of the moisture shows the progress of the mixing cycle for operator feedback; any effects due to wear, material jams or breakage in the mixer can be observed before they become a problem. The moisture value is updated continuously and the calculated water value is displayed before the water is added; alarm messages are displayed when necessary. The result is a window on your mixer performance that shows you more than you ever thought possible - and it's simple to use. Operators love it and your product quality will improve immediately.

**Two programs** to suit your operation and budget:

**MasterMix** gives highest speed and greatest mixer output for plants where the mixer is running batches back to back without a break for at least some of the time. Handles dry or wet cast equally well.

**MicroMix** is lower in cost because it does not require a water meter or scale. It is useful for dry cast only and takes longer to make a mix, so it has its place in lower throughput applications where the mixer usually stands idle between batches.

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