



APPLICATION BRIEF

MEASUREMENT OF WATER ADDED TO CEMENT BATCHES TRANSPORTED IN MIXING TRUCKS LEAVING A BATCH PLANT

August 1, 2024

PRODUCT OVERVIEW

Several states require that cement trucks used in DOT contract work be equipped with a flow meter so any water added to the mix will be logged. The strength of concrete is dependent, to a large degree, on the amount of water used in the mix. All DOT and most other contracts specify the "Slump" or stiffness of the mix. When water is added after the concrete leaves the Redi-mix plant, the properties of the concrete change. Therefore, it is crucial to record the amount of water added so the Redi-mix plant and design engineers can ensure the properties of the concrete still fall within the desired design specifications.

PRODUCT SPECIFICATIONS

FLOMEC® has two meters that work well for this application: A1N and 01N.

The A1N has an accuracy of 1.5% of rate and the display can be remotely mounted for ease of reading. It can also be equipped with a pulse output to transmit water volumes to other equipment.



The 01N is an economical option with accuracy of 5% of rate. It does not come with a remote display option, nor does it have output options.

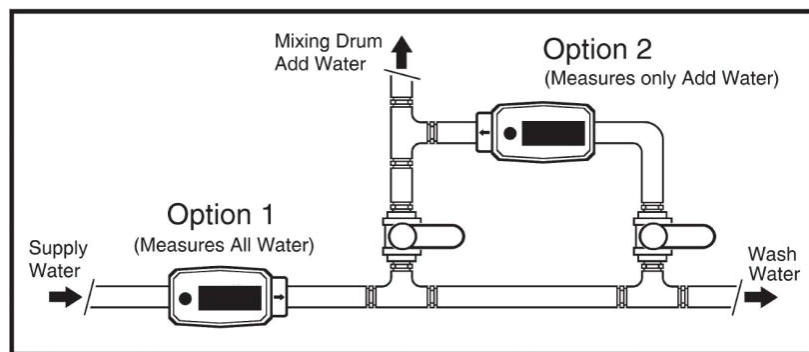


PRODUCT SOLUTION

Problem: Drivers need to add water on site to bring the mix to suitable slump rating. If the additional water is not measured and monitored, the resulting concrete may fall out of the required specification for the job.

Solution: Add a flow meter in line to accurately monitor water added to the mix.

Place the flow meter in-line on the truck between the water storage tank and the mixing drum. Valves are arranged so that water added to the mixing drum will be metered.



Note: Remote display option requires A1 flow meter choice with Q9 remote display mounting kit, Part number: 113275 -10. A pulse output can also be added to the A1 flow meter by ordering the following: Part number: 125100 -10, 4 -20mA / Pulse Out Module (Pairs with Q9 Display) SAFE AREA ONLY.