



Uni-Blend™

Accurate & Repeatable Fluid Mixing

Fluid Mixing Technology

The Uni-Blend™ mixing system is designed to accurately mix water with concentrated fluids in any ratio from 1:1 to 50:1 and deliver the mixture under pressure to a customer-supplied piping network. The Uni-Blend™ automatically mixes batches and maintains a reserve supply of up to 50 gallons [190 liters] per ratio. Up to three batches of differing ratios can be maintained in separate tanks.

The Uni-Blend™ is the only fully programmable industrial fluid mixing system available on the market and is built for years of service in tough, industrial environments.

3 ratios

Maintain one, two, or three separate mix ratios



maintain any ratio between 1:1 and 50:1

Specifications

- **Water supply requirements:** 30-60 psi [2-4 bar], 4 gallons/min [15 liters/min] minimum available flow
- **Power requirements:** 230 VAC, 60Hz, 3 phase with neutral tap, 30 amp
- **Holding tank capacity:** 50 gallons [190 liters] per tank
- **Mix ratio range:** 1:1 to 50:1
- **Number of mix ratios:** 1 to 3
- **Mixed fluid supply:** 2 gallons/min [8 liters/min] per ratio
- **Mixed fluid pressure:** 5-80 psi [0.34-6 bar]
- **Tote stand size:** 48" [1219 mm] x 40" [1016 mm] tote, 330 gallons [1250 liters] or 275 gallons [1040 liters]

Accurate Flow Control

The Uni-Blend™ utilizes precise flow meters to ensure accurate mixing. Mixing is controlled by the PLC which opens a water valve and monitors the water flow rate. Simultaneously, the PLC controls the rotational speed of a gear pump which delivers concentrate at the proper rate for the programmed mix ratio. The flow rates are constantly monitored to maintain the proper rate regardless of viscosity, temperature, or downstream pressure. This level of precision allows the Uni-Blend™ to deliver the perfect batch each and every time.

Optional platform holds a 275 gallon [1040 liter] or 330 gallon [1250 liter] tote of concentrate



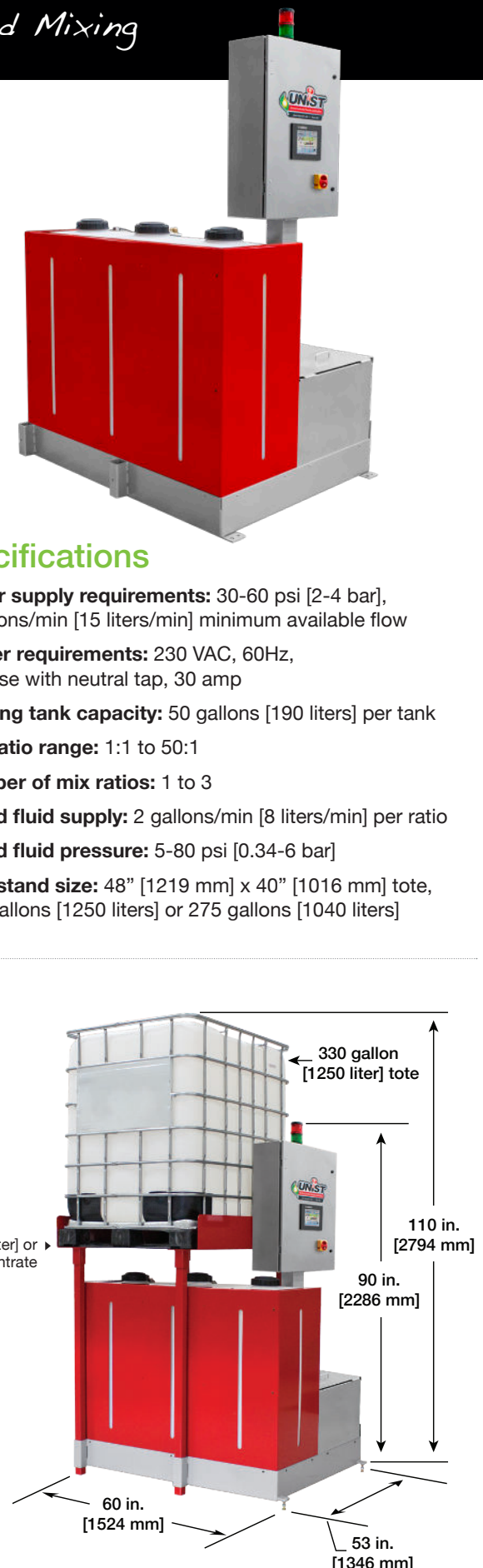
Large tank opening makes for easy cleaning & maintenance



Durable, heavy-gauge steel construction



Reliable & accurate positive-displacement concentrate pump

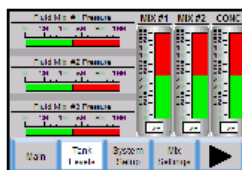


Maintain The Perfect Pressure & Mix

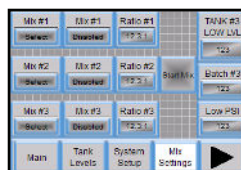
The Uni-Blend™ is designed to constantly circulate your fluid to maintain a homogeneous mixture. The mixed fluid in the tank is stored at atmospheric pressure and delivered to your piping network under pump pressure. To ensure continuous circulation, the piping network should be configured as a loop starting and returning to the Uni-Blend™. To set and maintain proper fluid pressure, a relief valve is installed in the return line of the loop.



View alarm details



View tank levels



Adjust mix settings

Easy Setup & Intuitive Interface

At the heart of its advanced control system is an industrial PLC and touch screen user interface which makes monitoring the operation and setting mix ratios easy.

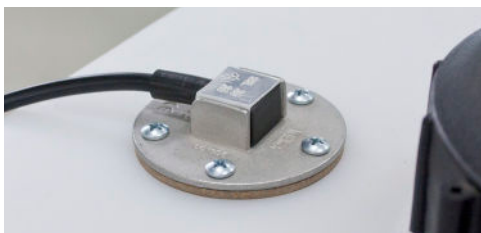
Continuous Monitoring

The system is designed to constantly monitor the mixing operation and create an alarm condition if a fault occurs. The system features a warning light as well as an alarm output on the PLC which can be used for remote monitoring of the system.



The Uni-Blend™ monitors:

- Low concentrate level
- Low water flow
- Low batch level (mix demand exceeds supply)
- Low concentrate flow
- Mix tank high level (back flow monitor)
- Low output pressure



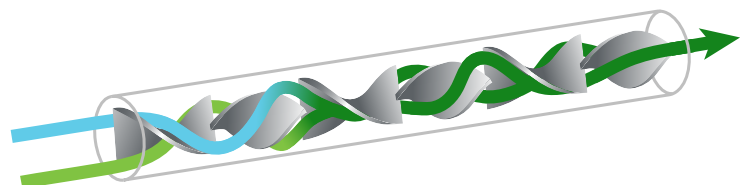
Level sensors monitor fluid levels

Automatic Replenishment

The Uni-Blend™ maintains a continuous supply by monitoring fluid levels and automatically replenishing your batch when necessary. The holding tank(s) contains a level sensor that is monitored by the PLC. The tank will fill with the mixture until it reaches the appropriate level for the programmed batch size, at which time the water valve will close and the concentrate pump will stop. This process will repeat itself as necessary to refill the tank when the fluid drops to a pre-programmed level.

Complete Mixing

The Uni-Blend™ utilizes an in-line static mixer to ensure a complete blend of the water and concentrate. The design of the static mixer's internal fins force the water and concentrate to intermix. This results in a perfect homogeneous mixture.





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