

No Turbine Meter or Heat Exchanger!

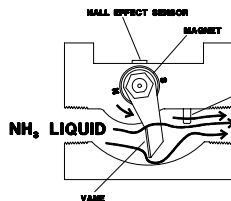
Affordable, Computer Controlled NH₃ Application System uses GPS Technology and New Precision Flow Meter

KONTROL-FLO II™ is a unique new system for anhydrous ammonia application. Ammonia flow rate is measured using a precision variable area meter that automatically compensates for density changes due to temperature. The controller is intuitive to operate, has a large back lit display, big toggle switches (not a flat keypad) and a tough anodized aluminum case. A single 35 feet control cable with weatherproof connectors connects the controller to the flow meter and control valve. The flow rate can be automatically controlled and corrected for changes in tractor speed or manually adjusted at any time. An optional GPS receiver uses the latest satellite navigation technology to accurately measure the tractors true ground speed.

Powerful Controller is Easy to Use

A two level menu system allows the user to quickly adjust the swath width, set the application rate in pounds N per acre, set alarm levels, clear the total acres and total gallons counters and adjust vapor compensation. It can also monitor the actual pounds N per acre, acres covered, total gallons flowed, NH₃ temperature, flow rate in GPM and tractor speed. Settings and totals are saved in non-volatile memory so the operator doesn't have to re-program after switching the controller off. An extra large back lit LCD display is easy to read in any lighting condition.

Variable Area Meter (Patent Pending)



A variable area meter measures the NH₃ liquid flow rate. Unlike turbine flow meters, the meter can't be damaged by high vapor flow rates caused by the nurse tank running empty or

nurse tank debris and does not require a straight section of pipe before the meter. The flow readings are transmitted to the controller using an industrial standard 4-20 milliamp current loop. Current loop communications are immune to voltage noise that can cause flow measurement errors.



No Heat Exchanger Required

Kontrol-Flo uses a field proven method to compensate for vapor in the NH₃ liquid. First, the vapor-induced error is determined for a specific system installation.

Then the error is entered into the controller as percent vapor compensation. The controller applies this compensation to the measured flow rate resulting in accurate, repeatable flow readings without expensive heat exchangers or liquefiers.

GPS Ground Speed

The U.S. Department of Defense developed the Global Positioning System, (GPS) for military navigation. GPS was first and foremost a defense system and was designed to be impervious to jamming or interference making GPS a very hardy reliable system. Kontrol-Flo II uses an 8-channel receiver developed by Trimble Navigation, a leader in GPS systems. This is the same technology used in precision farming systems costing thousands more. The GPS receiver provides the controller with a +/- 0.1 miles per hour true ground speed to make automatic flow rate adjustments and determine accurate acres covered information. The GPS receiver uses a small weatherproof magnetic mount antenna that's quickly installed and removed.



Affordable Performance

The Kontrol-Flo II system is packed with features providing NH₃ application performance comparable to the most expensive systems at a significantly lower cost. Compare the Kontrol-Flo II to other anhydrous application systems. Kontrol-Flo II is clearly a cost-effective high performance system.



10480 Shady Trail Lane Suite 106
Dallas, Texas 75220

800-345-8105 • 214-357-4591