Avensys

DREXELBROOK®

Biofuel Solutions

- Overfill Protection
- Total Level
- Interface Measurement

AMETEK®

PRODUCT AND APPLICATION GUIDE

The Products You Need for the Biofuel Industry

The biofuel industry, although relatively new, is quickly becoming a major presence in the movement from oil energy dependence to other means of supporting the world's energy demands. This industry may be new, but our research shows us that the biofuel companies of the future may well be the food processing giants which are already used to extract end products from crop waste products. Drexelbrook is uniquely positioned with 50 years of experience in handling the specialized needs of some of the largest food processing companies in the world. Drexelbrook has a wide selection of products and technology offerings, and the expertise to apply them, affording Drexelbrook the opportunity to provide the best possible solution to meet the instrumentation requirements specific to the biofuels industry.

Interface Measurement

Universal III™ — The Universal III uses RF Admittance technology to monitor and control continuous level applications commonly found in the biofuel industry. The Universal III is one of Drexelbrook's product offerings specifically designed for the harsh process materials found in this industry. No other RF transmitter matches the accuracy, stability, and repeatability of the Universal III. This translates into smoother operation and less downtime. Drexelbrook is the leader in RF Admittance technology as a result of our wide range in product offerings.

Point Level Applications:

ThePoint™ — Drexelbrook's ThePoint RF Admittance point level switch comes in both a line-powered and two-wire version. ThePoint is an excellent product for most of your point level application needs. Maintenance free and no moving parts make this the ideal choice to replace high maintenance, less robust point level products. ThePoint is the best value for a no calibration point level switch in the industry.

VeriGAP™ — Drexelbrook's VeriGAP employs ultrasonic technology for reliable high or low-level measurement in a wide variety of liquids. The VeriGAP is the only safe gap switch available as it uses Verify™ circuitry checks that confirm the complete system is functioning correctly, including the crystals, crystal bonding, electronics and relay. Unlike other gap switches with so-called self-testing features, the VeriGAP requires no calibration. This eliminates the potential for error or spills during installation and setup.

	Application	Technology	Drexelbrook Solution
Level Transmitter-1	Grain Storage Silos	Radar, TDR	DR7000, DR7100
Level Transmitter-2	Grain Grind Silos	Radar, TDR	DR7000, DR7100
Level Transmitter-3	Syrup Tanks	RF Admittance Ultrasonic	Universal III™, RCT™ USonic, USonic-R
Level Transmitter-4	Thin Stillage Tanks	RF Admittance Ultrasonic	Universal III™, RCT™ USonic, USonic-R
Level Transmitter-5	Whole Stillage Tanks	RF Admittance Ultrasonic	Universal III™, RCT™ USonic, USonic-R
Level Transmitter-6	Ethanol Day Tanks	Radar, TDR, Magnetostrictive	DR7000, DR7100, DM Series
Level Transmitter-7	Liquefaction Tanks	Radar, TDR, Magnetostrictive	DR7000, DR7100, DM Series
Level Transmitter-8	Fermentation Tanks	Radar, TDR, Magnetostrictive	DR7000, DR7100, DM Series
Level Transmitter-9	"Off Spec." Ethanol Tanks	Radar, TDR, Magnetostrictive	DR7000, DR7100, DM Series
Level Transmitter-10	Yeast Day Tank	Radar, TDR, Magnetostrictive	DR7000, DR7100, DM Series
Level Transmitter-11	Denaturant Tanks	Radar, TDR, Magnetostrictive RF Admittance	DR7000, DR7100, DM Series Universal III™, RCT™
Level Transmitter-12	Ethanol Storage	Radar, TDR, Magnetostrictive	DR7000, DR7100, DM Series
Level Transmitter-13	Chemical Storage • Caustic • Sulfuric • Ammonia • Urea	Radar, TDR RF Admittance	DR7000, DR7100 Universal III™, RCT™
Level Transmitter-14	Enzyme Storage • Apha Amylase • Gluco Amylase	Radar, TDR RF Admittance	DR7000, DR7100 Universal III™, RCT™

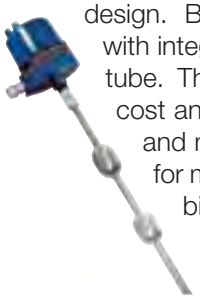
Ethanol Production

	Application	Technology	Drexelbrook Solution
Level Switch - 1	Grain Storage Silos	RF Admittance	ThePoint™
Level Switch -2	Grain Grind Silos	RF Admittance	ThePoint™
Level Switch -3	Syrup Tanks	RF Admittance	ThePoint™
Level Switch -4	Thin Stillage Tanks	RF Admittance	ThePoint™
Level Switch -5	Whole Stillage Tank	RF Admittance	ThePoint™
Level Switch -6	Ethanol Day Tanks	RF Admittance	ThePoint™
Level Switch -7	Liquefaction Tanks	RF Admittance	ThePoint™
Level Switch -8	Fermentation Tanks	RF Admittance	ThePoint™
Level Switch -9	"Off Spec." Ethanol Tanks	RF Admittance	ThePoint™
Level Switch -10	Yeast Day Tank	RF Admittance	ThePoint™
Level Switch -11	Denaturant Tanks	RF Admittance, Gap Switch	ThePoint™, VeriGAP™
Level Switch -12	Ethanol Storage tanks	RF Admittance, Gap Switch	ThePoint™, VeriGAP™
Level Switch -13	Chemical Storage • Caustic • Sulfuric • Ammonia • Urea	RF Admittance, Gap Switch	ThePoint™, VeriGAP™
Level Switch -14	Enzyme Storage • Apha-amylase • Gluco- amylase	RF Admittance, Gap Switch	ThePoint™, VeriGAP™

Continuous Level Applications:

USonic™ and USonic-R™ — Drexelbrook's ultrasonic technology solution for continuous level measurements comes in integral and remote mounting options. This product family offers a 2-wire and line power version for non-contact level measurement of liquids and slurries for level, distance, volume and open channel flow. Patented SmartGain™ circuitry automatically ignores false echoes from internal tank obstructions and agitator blades without adjustment.

DM Series — Drexelbrook offers another technology option for tank gauging, magnetorestrictive sensing. This option takes field proven sensing technology and incorporates intrinsic safety with a field programmable zero and span. The packaging is a patented low-clearance design, making the DM Series ideal for level monitoring in a variety of liquids and tank designs. There are two variations of sensors, a rigid 316SS or a flexible PVDF design. Both offer totally welded construction with integrated electronics within the sensing tube. The location of the electronics reduces cost and offers greater options for insertion and mounting, making it a perfect choice for many tank gauging applications in the biofuel industry.



Radar and TDR — Drexelbrook demonstrates its breadth of technology yet again with the availability of a high quality radar and TDR product offering. These instruments both come in a two-wire version that is approved for Class 1, Div 1, Zone 0 installations and measure for distance, level & volume of liquids, slurries and solids.

The biofuel industry is a major global market for Drexelbrook. Our RF Admittance point and continuous level instruments have met the extreme environments found in oil refineries, offshore platforms and chemical plants for over 50 years. Drexelbrook has a wide selection of products and technology offerings, and the expertise to apply them, affording Drexelbrook the unique position to provide the best possible solution to meet the instrumentation requirements specific to the biofuel industry.

CONTROL READERS' CHOICE AWARDS

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