

A photograph of an ethanol production facility. In the foreground, there is a field of tall, green corn plants. Behind the corn, a chain-link fence runs across the frame. In the background, several large industrial storage tanks are visible, along with a complex of pipes, towers, and a red-and-white striped smokestack. The sky is clear and blue.

FLUKE®

Ethanol Production Solutions

Fluke solutions can help you keep pace with today's fuel consumption.

Ethanol manufacturing is a rapidly growing industry segment as usage of ethanol as a biofuel alternative to gasoline increases. As a renewable fuel source it is environmentally friendly and in demand worldwide. The potential for ethanol is tremendous.

Fluke makes rugged, reliable, quality tools ethanol professionals can count on when working on any part of the manufacturing process. We know that ethanol manufacturing is a tough, demanding chore. Fluke designs tools knowing the uniqueness of the ethanol manufacturing environment, the professionals who work there, and the challenges they face every day. Fluke tools give results you can count on all the time, whatever you're doing.

Plant Engineer

Issues faced:

- Maximizing uptime
- Prevent system interruption
- Maintain plant and personnel safety

Fluke solutions:

- 📶 Fluke Connect
- ▲ Multifunction process calibrators
- Power quality analyzers
- 🔴 Thermal imagers
- 🔴 Vibration tester

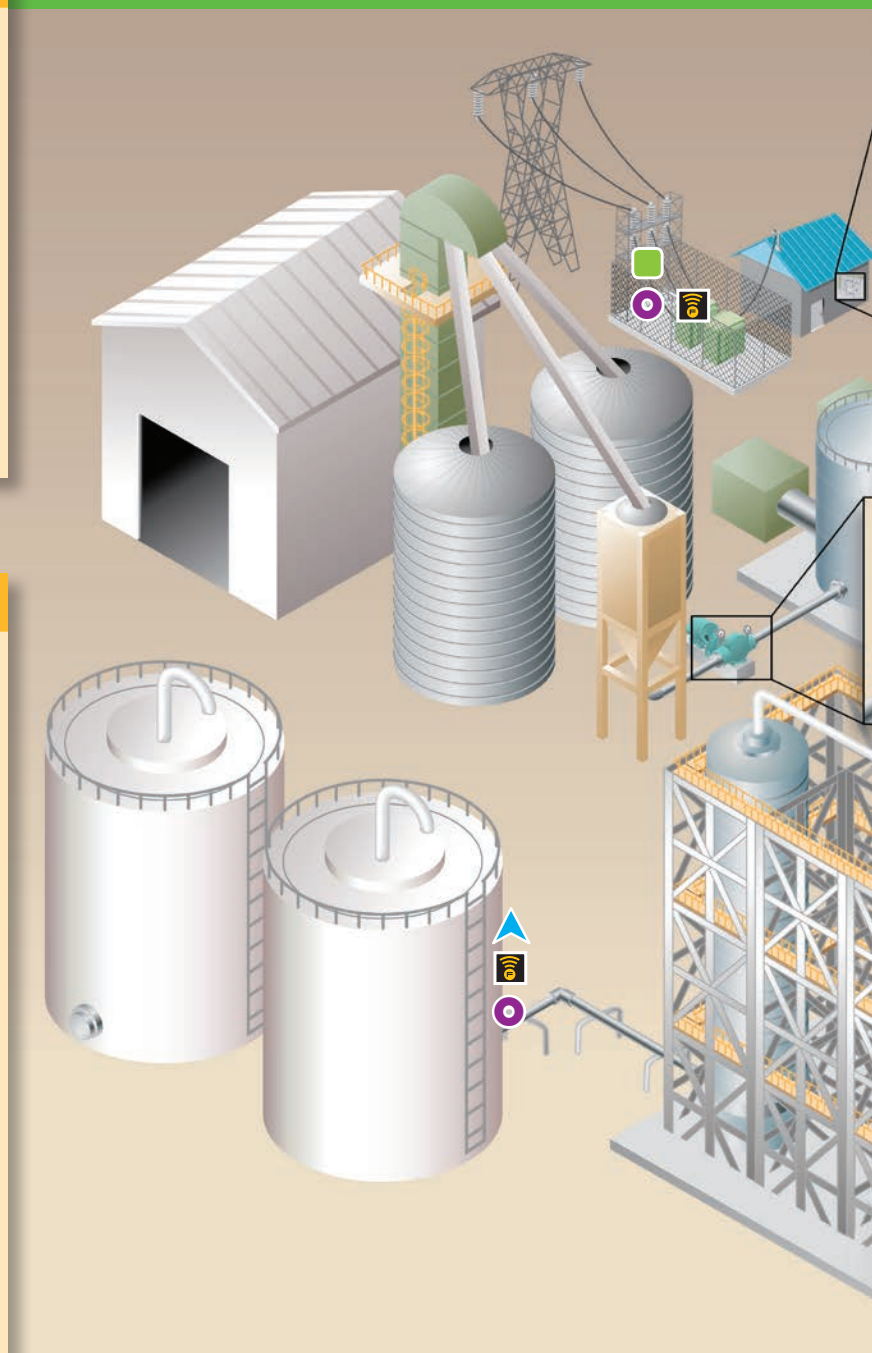
Electrician/Engineer

Issues faced:









- Power quality
- Safe, high energy system maintenance
- Meeting safety standards
- Troubleshooting breakers, motors and switchgear

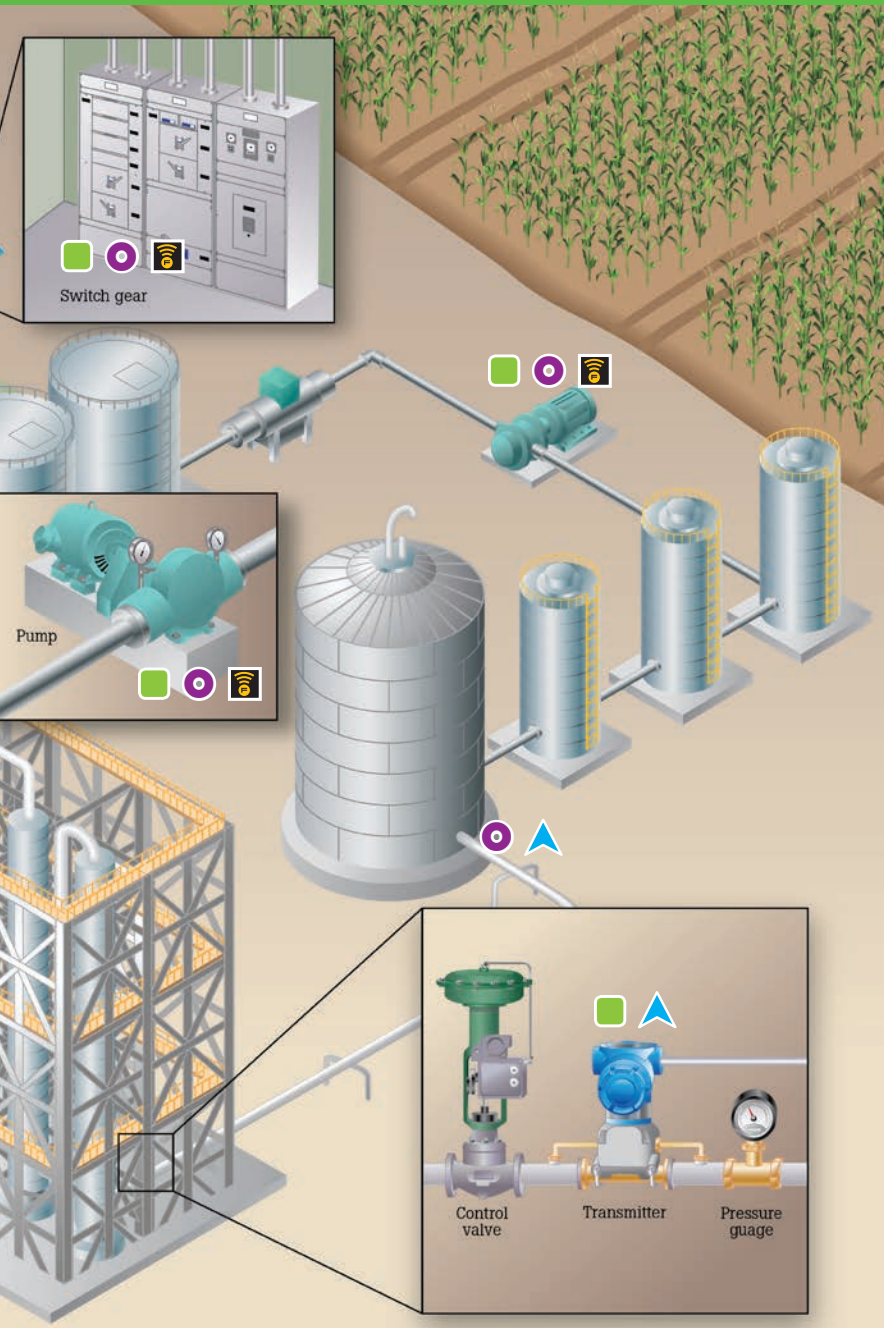
Fluke solutions:

- 📶 Fluke Connect
- ▲ Multifunction process calibrators
- ▲ Process test tools
- Digital multimeters
- Power quality analyzers
- Power loggers
- Clamp meters
- Insulation multimeters
- Electrical testers
- 🔴 Thermal imagers
- 🔴 Infrared window
- 🔴 Vibration tester
- 🔴 Alignment tools



Fluke solutions for ethanol plants

Process Calibration Tools			Electrical Test Tools				
Multi function process calibrators	Pressure gauges and calibrators	Process test tools	Power quality analyzers	Portable oscilloscopes	Power loggers	Clamp meters	Insulation multimeters
 754 726	 700G 729	 773	 430 Series II	 190 Series II	 1738	 376FC	 1587FC



Control Engineer

Issues faced:

- Process and system integration
- Safety systems testing
- Process interruption

Fluke solutions:

- Fluke Connect
- Multifunction process calibrators
- Process test tools
- Pressure gauges and calibrators
- Portable oscilloscopes

Plant Manager

Issues faced:

- Ensuring continuous uptime
- Controlling energy costs
- Maintaining good ROI on equipment
- Managing expenses

Fluke solutions:

- Fluke Connect
- Power quality analyzers
- Thermal imagers

Diagram is not intended to be an exact representation.
Diagram components are not to scale and are for illustration purposes only.

Fluke offers a full line of solutions for ethanol professionals.
Go to www.fluke.com for detailed information on these and all Fluke products.

Infrared and Vibration Tools							Software
Electrical testers	Digital multimeters	Thermal imagers expert	Thermal imagers professional	Infrared windows	Vibration tester	Alignment tools	Maintenance software
T5 Series	279 FC	TiX580	Ti480	CV Series	810, 805 FC	830	Fluke Connect®

Recommended ethanol plant solutions

Thermal imagers

Best suited for: ○

- Inspecting pipes, motors and pumps
- Capturing fluid/solid levels on tanks and silos
- Inspecting boilers, process heaters and other heat-generating units
- Inspection of power distribution, fuse boxes, insulators, transformers and other electrical system components



Power loggers

Best suited for: □

- Capturing and logging over 500 power quality parameters
- Troubleshooting and performing advanced analysis on power quality issues
- Energy surveys to determine sources of electrical energy waste



Digital multimeters

Best suited for: □

- Electrical system installation and troubleshooting
- Quick voltage detection
- Environments with both AC and DC (autoVolt) or ghost voltages



Fluke Connect

Best suited for: 📶

- Simplifying preventive maintenance programs
- Seamlessly integrating tool data into software
- Diagnosing asset health in the field
- Cloud-based data sharing



Vibration tester

Best suited for: ○

- Predictive and condition-based maintenance
- Identifying root cause and diagnosing severity of machine's condition
- Prioritizing critical repair and replacement options
- Use with motors, pumps, fans, compressors, belt/chain drives, gearboxes and spindles



Process tools

Best suited for: ▲

- Maintenance and calibration of process instruments and control system I/O
- Measuring, sourcing and simulating 4-20 mA control loops



Power quality analyzers

Best suited for: □

- Troubleshooting and preventing problems in power generation, transmission and distribution systems
- Conducting load studies to reduce energy usage applications
- Use with motors, pumps, generators, transformers, compressors and electrical panels



Pressure calibrators

Best suited for: ▲

- Pressure calibration of transmitters, gauges, switches and custody transfer meters
- Maintenance of almost any pressure device using pressure sourcing and mA measurements
- Calibrating P/I instruments with simultaneous pressure and current measurement



Fluke. Keeping your world up and running.®

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