

Recommended oil and gas solutions

Documenting process calibrators

Best suited for:

- Calibration and maintenance of process instrumentation and control systems.
- Sourcing, measuring and documenting virtually any process variable

Oil and gas applications: Pressure and temperature transmitter calibration; calibration and configuration of HART devices; documenting field calibrations for recall and upload



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 milliamp measurements
- Calibrating P/I instruments with simultaneous pressure and current measurement

Oil and gas applications: Pressure measurements using internal sensor, measure mA while sourcing 24 V loop power



Thermal imagers

Best suited for:

- Providing non-contact measurement and display of a visual image of surface temperatures to easily and safely identify potential problems
- Reducing the need for unplanned maintenance to correct previous repairs

Oil and gas applications: Steam trap leakage, electrical panels, motors, VFDs, tank level and sludge level indication, refractory, furnaces, reformers, transformers, and pumps



Vibration testers

Best suited for:

- Diagnosing machine faults to extend machine life and reduce costs
- Reducing unexpected serious failures to help prevent production stoppages that cut into the bottom line
- Giving maintenance staff time to schedule repairs and acquire parts
- Anticipating problem areas before failure

Oil and gas applications: Pumps, compressors, motors, fans, and blowers



More recommended oil and gas solutions

Visual IR thermometers

Best suited for:

- Displaying a visual heat map of surface temperatures
- Finding heating and ventilation problems
- Non-contact monitoring of pumps, electrical motors and panels
- Reducing the need for unplanned maintenance to correct previous repairs

Oil and gas applications: Valve packing leakage, non-contact electrical panel inspection, pump and motor inspection



Infrared thermometers

Best suited for:

- Gathering surface temperature readings
- Reducing the need for unplanned maintenance to correct previous repairs

Oil and gas applications: Heating, motors, HVAC, circuit breaker inspection



Temperature calibrators

Best suited for:

- Troubleshooting and calibrating temperature
- Testing temperature sensors and transmitters
- Measuring and sourcing thermocouples and RTD's

Oil and gas applications: Measure thermocouples, ohms, and volts to test sensors and transmitters; calibrate transmitters by sourcing/simulating thermocouples, RTDs, volts, and ohms; powering transmitters during test using loop power supply with simultaneous mA measurement



Insulation multimeters

Best suited for:

- Testing a wide range of insulation resistance and digital multimeter tests including simple spot checks to timed tests
- Troubleshooting and preventive maintenance

Oil and gas applications: Switchgear, motors, variable speed drives, generators, electrical systems and cables; test voltages from 50 V to 1000 V (Insulation tester to 5000 V also available)



mA Process clamp meters

Best suited for:

- Measuring 4 to 20 mA signals *without breaking the loop*
- Sourcing, simulating and measuring mA
- Sourcing, measuring DC voltage

Oil and gas applications: mA sourcing, simulation and measurement; loop calibration, maintenance and repair



Power quality analyzers

Best suited for:

- Finding power quality problems before they damage critical equipment
- Conducting load studies to reduce energy usage applications

Oil and gas applications: Generators, harmonics (electronics), load studies



Handheld oscilloscopes

Best suited for:

- Troubleshooting and installation applications
- Finding fast answers to problems in machinery, instrumentation, control and power systems
- Bus health testing for industrial bus systems

Oil and gas applications: Pumps, compressors, motors, fans, and blowers



Clamp meters

Best suited for:

- Measure 1000 A ac or dc with fixed jaw to measure current in motors, vaults and bus bars
- Clamp around bus bars or conductors in service panels to measure loads and line frequency in circuits

Oil and gas applications: Pumps, compressors, motors, fans, and blowers



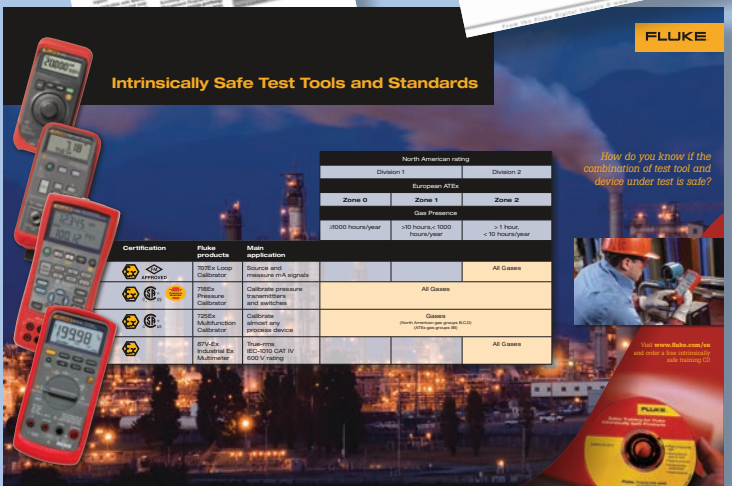
Process tools

Best suited for: Troubleshooting and calibrating current loop applications using the functionality of a loop calibrator and digital multimeter built into one tool.

Oil and gas applications: Measure, source, and simulate dc loop current



Petrochemical professionals can find application notes, case studies and demos of Fluke solutions at www.fluke.com/oilandgas



Fluke. *The Most Trusted Tools in the World.*

Fluke Corporation
PO Box 9090, Everett, WA 98206 U.S.A.
Fluke Europe B.V.
PO Box 1186, 5602 BD Eindhoven, The Netherlands
For more information call:
In the U.S.A. (800) 443-3853 or Fax (425) 446-5116
In Europe/M-East/Africa +31 (0) 40 2675 200 or Fax +31 (0) 40 2675 222
In Canada (800)-36-FLUKE or Fax (905) 890-6866
From other countries +1 (425) 446-5500 or Fax +1 (425) 446-5116
Web access: <http://www.fluke.com>

©2007-2014 Fluke Corporation.
Specifications subject to change without notice.
Printed in U.S.A. 1/2014 3106077D_EN

Modification of this document is not permitted without written permission from Fluke Corporation.

Fluke. Working to keep the oil and gas industry flowing.

Fluke solutions can help you maintain operational reliability and environmental safety

Fluke understands the petrochemical industry faces a range of challenges from dynamic market fluctuations to multiple stringent regulatory requirements, and downtime and inaccurate measurements can cost millions. The professionals that work in oil and gas know it is critical to maintain stable, continuous operations without sacrificing safety.

Onshore or offshore, upstream to downstream, Fluke makes reliable tools that professionals in the oil and gas industry can count on for accurate and consistent measurements. Tools designed for the demanding oil and gas environment, the people who work there, and the challenges they face every day. With 65 years as the industry leader, they can feel confident that Fluke has the solutions they need to keep the oil and gas industry flowing. **See our full line of innovative products at www.fluke.com**

Maintenance Superintendent

Focus:

Downtime prevention, safety regulations, budget goals

Issues faced:

- Ensuring uptime is continuous and predictable
- Safety of personnel and the environment
- Maintaining high product quality
- Staying within budget

Fluke solutions:

- ◆ Thermal imagers
- Power quality analyzers
- ▲ Process tools
- Vibration testers

Instrument Technician

Focus:

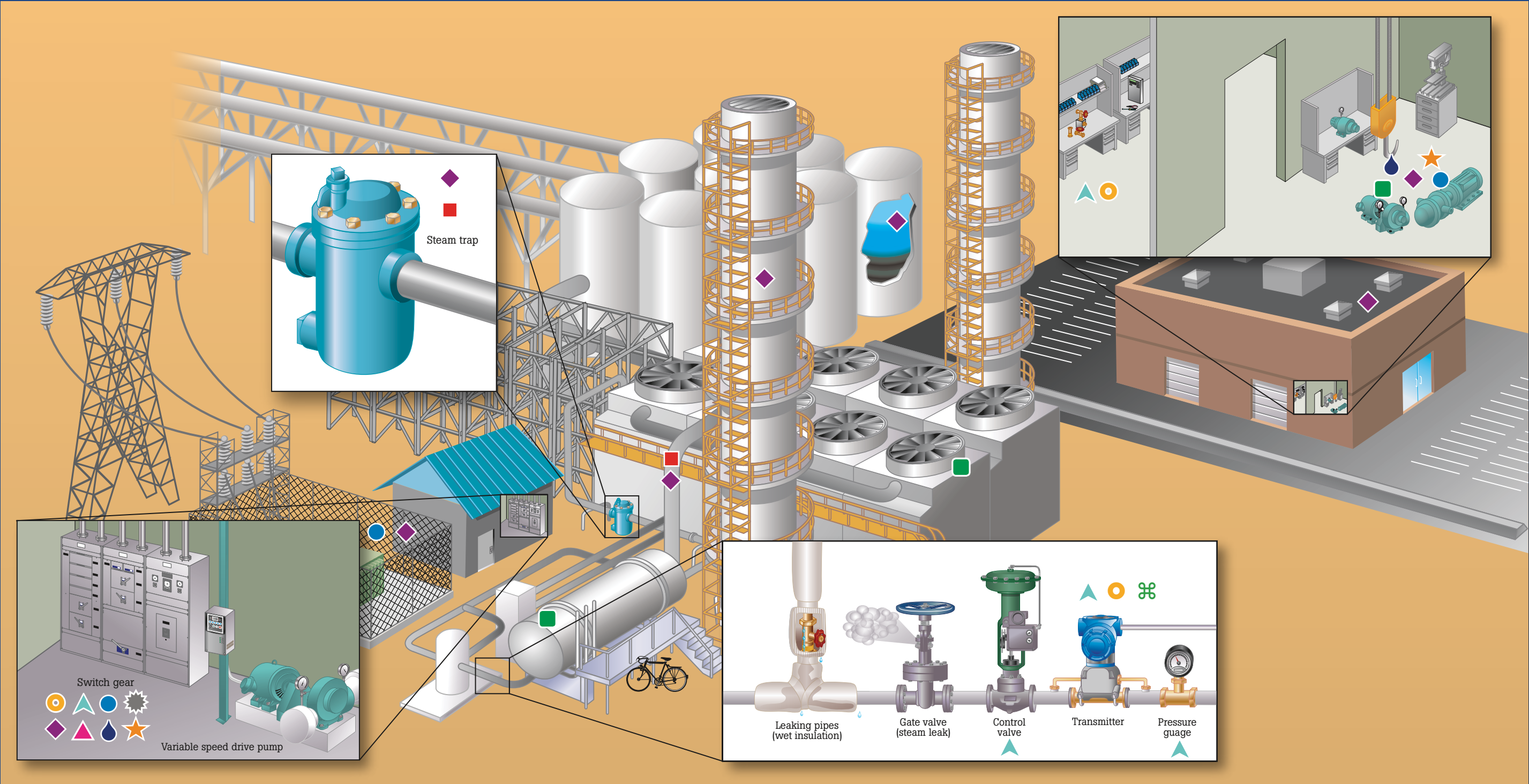
Equipment and systems testing, maintenance and repair

Issues faced:

- Preventing downtimes
- Safety systems testing
- Providing immediate response and repair during process interruptions

Fluke solutions:

- ▲ Process tools
- ▲ Documenting process calibrators
- Handheld oscilloscopes
- ▲ Pressure calibrators
- ✂ Loop calibrators
- ★ Digital multimeters



Mechanic/Millwright

Focus:

Installation, assembly, and preventive maintenance

Issues faced:

- Meeting equipment standards and specifications
- Effectiveness of repairs (valve repacking)
- Assembling machinery
- Determining optimal machinery placements

Fluke solutions:

- ▲ Process tools
- Infrared thermometers
- ◆ Thermal imagers
- Vibration testers
- Visual IR thermometer

Electrician

Focus:

Electrical installation, maintenance and repair

Issues faced:

- Delivering efficient, consistent and quality power from utility or generation to process systems
- Maintaining safety and high energy systems
- Controlling efficient breakers and motors

Fluke solutions:

- Power quality analyzers
- Infrared thermometers
- ▲ Process tools
- ⚙ Insulation multimeters
- ▲ Clamp meters
- Visual IR thermometer
- Vibration tester

Measurement Tech

Focus:

Calibration of flow meters involved in custody transfer

Issues faced:

- Accurate measurements of flow
- Calibration of flow instruments
- Repair verification

Fluke solutions:

- ▲ Process tools
- Visual IR thermometer
- ◆ Thermal imagers
- ⚙ Insulation multimeters

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

Fluke gas and oil solutions

Learn how Fluke solutions can save you time and money while increasing efficiency and safety at www.fluke.com/gasandoil
Based on you. Built by Fluke.

Process tools	Power quality analyzers	Documenting process calibrators	Pressure calibrators	Loop calibrators	Custody Transfer Calibrators	Thermal imagers/ IR Windows	Digital multimeters	Vibration tester	Clamp meters	Temperature calibrators	Infrared thermometers	Visual IR thermometers	Insulation multimeters	Handheld oscilloscopes	
															
789	773	43x Series II	754	719PRO	709H	721	T1xx/2xx/3xx/4xx CV Series	28 II Ex	810	376	724	62MAX+	VT04	1587	190 Series II