



### **Chemical Processing Solutions**

# Fluke solutions can help you maintain operational reliability and environmental safety

Fluke understands the chemical processing industry faces a range of challenges from dynamic market fluctuations to high energy consumption to stringent regulatory requirements. Downtime, energy waste and inaccurate measurements can cost millions and chemical processing professionals know that it's critical to maintain stable, continuous operations without sacrificing safety.

From pre-treating raw materials, to converting materials with a reactor, cracker or kiln, to mixing and purification, Fluke makes reliable tools that professionals in chemical processing can count on for accurate and consistent measurements-tools designed for the demanding chemical processing 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 chemical processing industry up and running.

### **Maintenance Superintendent**

### **Issues faced:**

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

### Fluke solutions:

- A Multifunction process calibrators
- Power quality analyzers
- Vibration tester
- O Thermal imagers

### **Instrument Technician**

### **Issues faced:**

- Preventing downtime
- Safety systems testing
- Calibration of flow instruments
- Providing immediate response and repair during process interruptions

### Fluke solutions:

- Process test tools
- A Multifunction process calibrators

Steam

0

 $\bigcirc$ 

trap

- A Pressure calibrators
- Loop calibrators
- Portable oscilloscopes
- Digital multimeters

### **Mechanic/Millwright**

### **Issues faced:**

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

### Fluke solutions:

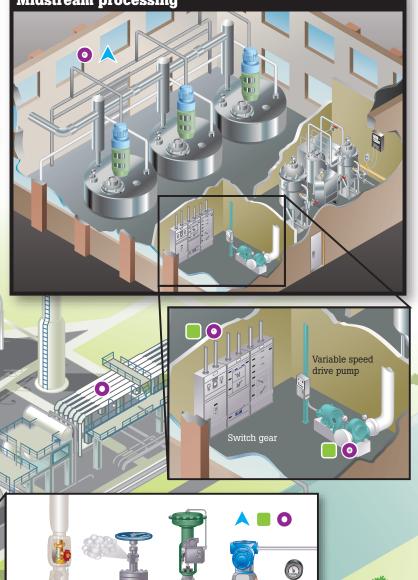
- A Process test tools
- Vibration tester
- Alignment tool
- Infrared thermometers
- Thermal imagers

## Fluke chemical processing solutions

Process Calibration Tools				Electrical Test Tools		
Multifunction process calibrators	Loop calibrators	Pressure calibrators	Process test tools	Power quality analyzers	Portable oscilloscopes	Power loggers
726         754	709Н	729	789         773	430 Series II	190 Series II	1738



### Midstream processing



### **Electrician**

### **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:

- Process test tools
- Loop calibrators
- Power quality analyzers
- Insulation multimeters
- Clamp meters
- Portable oscilloscopes
- Power loggers
- Thermal imagers 0
- 0 Vibration tester
- 0 Infrared thermometers
- 0 Infrared windows

### **Reliability Engineer**

### **Issues faced:**

- · Preventive maintenance and asset uptime
- Root cause analysis to prevent future failures
- Troubleshooting emergent issues

### Fluke solutions:

- Process test tools
- Multifunction process calibrators
- Insulation multimeters
- Thermal imagers 0
- Vibration tester O
- Infrared thermometers
- 0 Alignment tool

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

Control

valve

Gate valve

(steam leak)

Leaking pipes

(wet insulation)

Learn how Fluke solutions can save you time and money while increasing efficiency and safety at www.fluke.com

Transmitter Pressure

guage





### **Recommended chemical processing solutions**

### **Portable oscilloscopes**

### Best suited for:

Installing and maintaining electronic industrial equipment out in the field
Diagnosing industrial machinery, automation

and process controls and power electronics

• Bus health testing for industrial bus systems



#### **Process clamp meters**

#### **Best suited for:**

- Measuring 4-20 mA signals without "breaking the loop" in process controls systems
- $\bullet\,$  Sourcing 4–20 mA signals for testing control system I/O or I/Ps
- Measuring 10-50 mA signals in older control systems using the 99.9 mA range
- Taking measurements in hard-to-reach and hard-tosee areas

**Multifunction process calibrators** 

Calibrating and maintaining process instrumen-

pressure, frequency and transmitters in one tool Performing HART transmitter adjustment

Troubleshooting 4-20 mA loops, temperature,



### **Power quality analyzers**

#### **Best suited for:**

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

### **Vibration tester**

#### **Best suited for:**

- Predictive and conditionbased 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



### **Thermal imagers**

### **Best suited for:**

- Capturing and troubleshooting tank levels
- Detection of "hot spots" on motors, pumps, VFDs, bearing and conveyor belts
- Use with steam traps on stainless steel lines
- Inspecting boilers, process heaters and other heatgenerating units

0

#### **Temperature calibrators**

tation and control systems

#### **Best suited for:**

**Best suited for:** 

- Testing sensors and transmitters
- Sourcing amd simulating thermocouples, RTDs, volts and ohms
- Powering transmitters during test



#### **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.

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) 443-5853 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

©2015, 2017 Fluke Corporation. Specifications subject to change without notice. Printed in U.S.A. 9/2017 6004066c-en