# **Recommended manufacturing solutions**

#### **Power quality Digital multimeters** analyzers **Clamp meters Thermal imagers** Best suited for: **Best suited for: Best suited for: Best suited for:** • Productivity gains: two-• Troubleshooting and • Measuring in hazardous • First line of defense person jobs can now be preventing problems for displaying a visual or awkward test areas performed by one person in power distribution image of surface temwhere detachable • Safety improvement: stay display and iFlex® systems peratures to easily and • Uncovering hard-to-find away from hazards while flexible probe improves safely identify electrical observing readings or intermittent issues and mechanical problems technician's safety • Power quality surveys • Troubleshooting line Quality control **Applications:** speed fluctuations and Process monitoring **Applications:** Measurements around nuisance trips Generators, harmonics moving machinery, **Applications:** difficult-to-access areas, **Applications:** (electronics), load studies, Electrical panels, switchgear electrical panels and PLC's, Motors, manufacturing overhead drives, systems, lights electrical motors, steam panels, systems/traps, poorly-lit building inspecareas, noisy tions, heaters/ electrical furnaces environments Handheld Visual oscilloscopes thermometers **HVAC** tools mA clamp meters **Best suited for: Best suited for:** Best suited for: **Best suited for:** • Troubleshooting and Preventative • Optimizing HVAC • Measuring 4 to 20 mA installation applications maintenance ventilation settings control signals without • Monitoring air quality • Finding fast answers to • Detection and capturing breaking the loop of issues with digital and factors that may problems in machinery, Measuring mA input instrumentation, control and thermal blended detract from comfort/ and output signals from and power systems images safety PLCs and other I/O • Pinpointing hot and cold Troubleshooting and Bus health testing for • Sourcing 4 to 20 mA, maintaining indoor industrial bus systems spots 1-5V or 0 to 10V air quality **Applications: Applications:** signals into PLC or **Applications:** Oscilloscope, resistance Motors, pumps, control system imputs HVAC system, test and and continuity bearings, **Applications:** windings, balance, ventilation measurement; high Source, simulation frequency boiler management and measurement measurements; operations of mA and voltage bus health control system I/O. and power Control loop measurements maintenance and troubleshooting Fluke offers a complete line of clamp meters **Vibration tester** Best suited for:

- Troubleshooting mechanical problems to instantly understand root cause
- Proactive repair planning and resource management
- Confirmation of repairs after maintenance
- Commissioning of new equipment

#### Applications:

Motors, fans and blowers, belt and chain drives, gearboxes, pumps, compressors and spindles measurements; bus health and power measurements



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 ©2013 Fluke Corporation.

Specifications subject to change without notice. Printed in U.S.A. 7/2013 6000378B\_EN Modification of this document is not permitted without written permission from Fluke Corporation.



# Manufacturing and automation controlthe backbone of our supply chain

### Fluke solutions for today's automation systems

Manufacturing plants have a variety of integrated systems and processes including robotic assembly machines, computer-aided design, automatic inspections and testing as well as storage-retrieval systems. Fluke knows keeping these systems up and running is critical to quality and one failure can lead to others, resulting in a significant loss of time and money. Fluke makes tools that perform to the rigorous standards of your manufacturing plant, regardless of how demanding or fast paced. Fluke tools are the industry benchmark against which all other tools are measured.

See our full line of innovative products at www.Fluke.com



Find application notes, case studies, and posters at www.fluke.com/ mfg-automation Fax + Web a

## **Plant Engineer**

#### Focus:

Maintaining and optimizing power and energy systems.

#### **Issues faced:**

- Consistent quality power loads
- Maintenance of continuous and predictable uptime
- Immediate response and repair to system interruptions
- Plant and personnel safety

#### **Fluke solutions:**

- **CNX 3000**
- Thermal imagers
- Power quality analyzers

+ HVAC tools

- Vibration tester
- **Clamp meters**

# **Electrician/Engineer**

#### Focus:

Maintenance, repair, and monitoring of all equipment and systems.

#### **Issues faced:**

- Efficient, consistent, quality power delivery
- Power installation and reworks
- Troubleshooting sensitive equipment

### **Fluke solutions:**

- **CNX 3000**
- Visual thermometers
- Digital multimeters
- Infrared thermometers
- Power quality analyzers (three-phase and single phase)
- Clamp meters
- mA clamp meter

# Manufacturing and automation control

Learn how Fluke solutions can save you time and money while increasing your productivity at www.fluke.com/mfg-automation

Based on you. Built by Fluke.



Digital multimeters		Power quality analyzers	Clamp meters	Visual thermometers	Thermal imagers		True-rms AC/DC clamps	Infrared thermometers	Handheld oscilloscopes	HVAC tools		Vibration testers	
0.3													
233	CNX 3000	435-II	381	VT02	Ti125	773	325	62MAX +	190 Series II	985	975	805	810



# **Plant Manager**

#### Focus:

Plant functionality and operation.

#### **Issues faced:**

- Controlling downtime and energy costs
- Good ROI on equipment
- Equipment failure diagnosis and prevention
- Expense management

#### **Fluke solutions:**

- Visual thermometers
- Thermal imagers
- Power quality analyzers
- Vibration tester

## **Automation**/ **Control Engineer**

#### Focus:

Automation design, programming, simulation and testing.

#### **Issues faced:**

- System configuration, optimization, and analytics
- Uptime maintenance
- Analog and digital I/O commision, testing and troubleshooting

#### **Fluke solutions:**

- **CNX 3000**
- Handheld oscilloscopes
- ★ Digital multimeters
- ▲ Clamp meters
- 🗼 mA clamp meter