Glass manufacturing solutions for glass manufacturing professionals

Glass manufacturing can be a challenging industry and cost containment is top of mind. Production efficiencies, demands of maintaining uptime while keeping down production costs add layers of complexity. Fluke has solutions to minimize waste, optimize equipment efficiency, prevent downtime and reduce energy consumption. Fluke tools are the industry standard against which other tools are measured.
## Plant Engineer

**Issues faced:**
- System configuration, optimization and analytics
- Minimization of system/line downtime
- Process and system integration

**Fluke solutions:**
- Fluke Connect®
- Infrared cameras
- Vibration testers
- Power quality analyzers
- Clamp meters
- Handheld oscilloscopes
- Digital multimeters
- Process documenting calibrators
- Temperature calibrators
- Process test tools
- Pressure testing
- Pressure tools

## Electrical Technician

**Issues faced:**
- Efficient, consistent power delivery
- Power installation and reworks
- Troubleshooting electrical equipment

**Fluke solutions:**
- Fluke Connect®
- Insulation multimeters
- Power quality analyzers
- Digital multimeters
- Clamp meters
- Power loggers
- Infrared cameras
- Visual IR thermometers
- Process test tools

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## Glass manufacturing solutions

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

### Maintenance Manager

**Issues faced:**
- Ongoing demand to reduce operating costs
- ROI of resources
- Increasing plant productivity

**Fluke solutions:**
- Fluke Connect®
- Infrared cameras
- Vibration tools
- Power quality analyzers
- Clamp meters
- Process documenting calibrators
- Process test tools

### Mechanical Technician

**Issues faced:**
- Troubleshooting equipment
- Servicing complex systems and machinery
- Electro-mechanical installation and maintenance

**Fluke solutions:**
- Fluke Connect®
- Digital multimeters
- Clamp meters
- Insulation multimeters
- Electrical testers
- Process test tools
- Infrared cameras
- Infrared thermometers
- Vibration/alignment tools

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

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**Infrared and Vibration Tools**

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**Software**

- Fluke Connect®
**Glass manufacturing solutions**

**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

**Clamp meters**

**Best suited for:**
- Verifying the presence of load current, AC/DC voltage and continuity
- Measuring 1000 A AC/DC (2500 A AC with iFlex) in motors, pumps, compressors, fans, blowers, vaults and bus bars

**Power quality analyzers**

**Best suited for:**
- Troubleshooting and preventing problems in power generation, transmission and distribution systems
- Conducting load studies to reduce energy usage

**Thermal imagers**

**Best suited for:**
- Detection of “hot spots” in motors, pumps, VFDs, bearings and wheels
- Inspect insulation or refractory lining of furnaces
- Monitoring of switching heaters

**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

**Insulation multimeters**

**Best suited for:**
- Wide range of tests including simple spot checks to timed tests and breakdown tests
- Insulation resistance testing up to 10 kV
- Use with switchgear, motors, generators and cables

**Digital multimeters**

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

**Infrared thermometers**

**Best suited for:**
- Quickly capturing spot measurements from a distance
- Accurately measuring up to 800 °C

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**Fluke**. Keeping your world up and running®