Dynamic process variation signature analysis for manufacturing, assembly, on-line processes, or product testing

Quality Issue Prevention
- Monitor every machine production cycle for process variance and detect changes in the process before they become quality issues.
- Advanced signature analysis algorithms combined with the force versus time or position ensures the highest level of discrimination between good and defective products.

Large Data Capacity
- Unlimited storage and recall of part profiles by customer part number.
- The solid state memory stores years of production data for playback and export.

Wide Application Range
- The PVM5000 is adaptable to many manufacturing machines and processes, and ideally suited for retrofit to plant floor production equipment.
- Compatible with OES’s complete series of sensors.

Operator Friendly
- Graphically display the process signature profile on a clear and intuitive, full colour touch screen operator interface.

Highlights
- Effective discrimination of process changes combining proven analysis method with the force versus distance option.
- Configurable for multi-reference or multi-cycle machines.
- Operator friendly interface including large color graphic LCD touch screen.
- Configurable I/O for interface with production machine.
- Language configurable.
- Network Interface.
- Simple installation.

FORCETechologies

PVM5000 PROCESS VARIATION MONITOR
For fastening and assembly applications

Patents
1998 US Patent No. 5,841,675
2014 US Patent Pending
FORCEView

ForceView is powerful graphical user interface software for monitoring the crimping process relative to the crimp process tolerance limit.

Data from each crimp is captured for 100% traceability. Configuration parameters are automatically loaded using the part number selection feature. ForceView integrates seamlessly with the machine production management software.

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<th>MODEL</th>
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<td>PVM5100</td>
<td>Crimping, Cold Heading, and Press Fit</td>
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**SENSOR OPTIONS**

- Piezo strain ✓
- Piezo force ring ✓
- PBT force sensor ✓

**TECHNICAL SPECIFICATIONS**

- Operating environment: 15 to 50°C, 60 to 120°F
- Supply voltage: 24VDC ext. adapter, 100-240VAC, 50-60Hz, 1.0A
- Communications: 1 Ethernet RJ45, 2 USB 2.0, 2 RS232 (optional)
- Digital inputs: 4
- Digital outputs: 6
- Display: 7” colour touch screen
- Mounting: Universal mounting bracket
- Dimensions: 185 x 198 x 70mm, 7.28” x 7.80” x 2.75”

**About OES Technologies**

OES Technologies products and technologies are developed specifically for the wire processing industry to monitor and inspect 100% of parts produced during the manufacturing process, and prevent part defects from entering the supply chain. OES’s dedication to innovation enables them to deliver a steady stream of cutting-edge technologies that meet the exacting demands of this ever-changing market.