

# In-Process Quality Monitoring Development Tool Kit

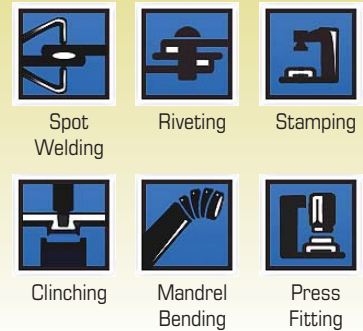
Monitor your process and develop an approach for in-process quality monitoring

## Explorer™ Kit



### Quality Without Question

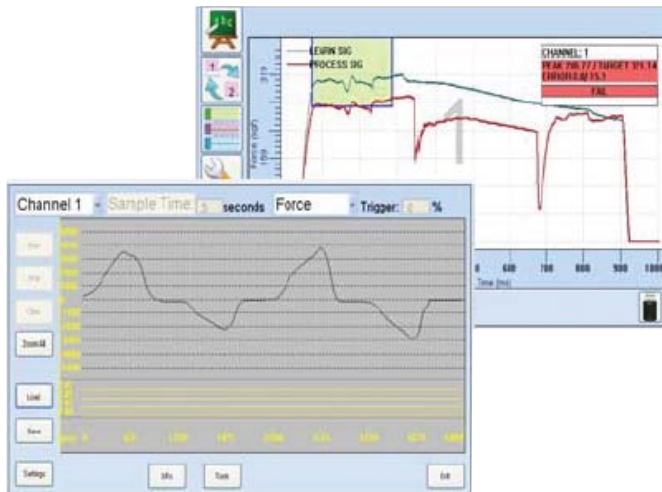
OES offers the hardware and software to enable quality control across many industries – Automotive, Medical, Military, Aerospace, Electronic, Food and Beverage. Knowing when process conditions are changing is a cost-effective way to improve your quality standards.



## Discover Versatile Process Monitoring Applications!

Supports process investigations for test & measurement and manufacturing applications

- New machine applications - testing & benchmarking
- Existing production machines - analyze process capability
- Supports development and implementation of in-process quality monitoring systems



Applications	
<b>Forming</b>	
Cold Heading	✓
Stamping	✓
Mandrel Bending	✓
Crimping	✓
<b>Assembly</b>	
Clinching	✓
Toxing	✓
Welding	✓
Riveting	✓
Press Fitting	✓
<b>Cutting</b>	
Drilling	✓
Tapping	✓
Machining	✓
Thread Rolling	✓

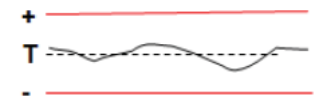
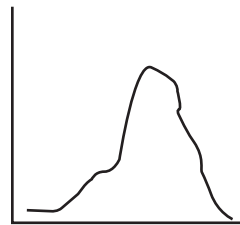
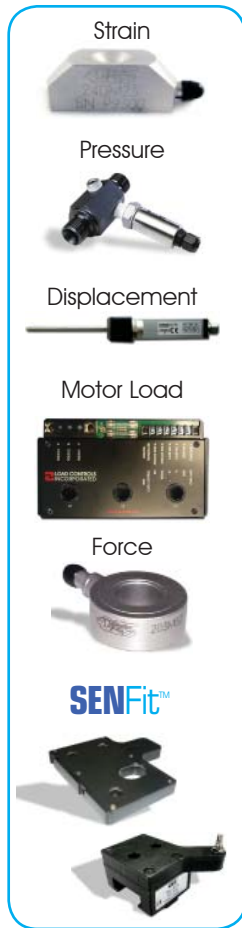
# Explorer™ Kit

## Typical Investigation Steps:

- Select and validate the sensor for the application (force, strain, displacement, pressure, or motorload)
- Capture the characteristics signature during the process
- Analyze the signature for repeatability
- Introduce changes to process (quality defects, dimensional change, etc.) and evaluate the characteristic changes to the process signature.
- Confirm process capability and implement an in-process monitoring system.

## APPLICATION ➔ SENSOR OPTIONS ➔ SIGNATURE CAPTURE ➔ PRESS MONITORING

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Machining	✓
Thread Rolling	✓



- Explorer Kit typically includes:**
- ForceWorx unit
  - PVM application software
  - Mounting stand
  - Connecting cables
  - Carrying case

## About OES Technologies

Since 1979, OES has provided world-leading manufacturers with process monitoring and control solutions. OES's powerful process monitor analysis technology is made available across the *ForceCapture* and *ForceWorx* product lines.



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