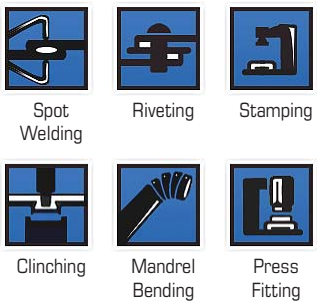
Integrated High Performance Sensor

Custom configured as an integral component of the machine SenFit™ Custom Sensors

OES TECHNOLOGIES

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.



Opens new opportunities for dynamic force monitoring applications

Highly Sensitive

- Configurable force range determined by application
- Provides a high resolution signature for superior defect detection
- More sensitive than quartz or piezoelectric sensors

True “Plug and Play”

- The SenFit sensor can be designed a complete substitute of a machine component
- Proven to be stable and reliable in challenging production environments

No More Shunting Effects

- Overcomes the limitations of conventional sensors including the risk of edge loading, overloading and shunting
- Shunting occurs when forces bypass (or are transferred in parallel to) the sensor and proceed into the base of the press.
- Shunting negatively impacts process monitor effectiveness and this is a risk when using mechanically mounted sensors

Developed & Patented by OES

- SenFit technology has been developed by OES
- SenFit sensors work exclusively with the ForceWorx and ForceCapture line of process monitors

Highlights

- High resolution
- Robust and reliable

SENFit™

SenFit™ Custom Sensors

FORCEWorx®

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

SENFit™

Process Variation Monitors

SenFit sensors interface exclusively with OES's process monitors

FORCEWorx

FORCECapture

Sensitivity range	2.2 to 22.0	mV/KgF
Measurement Range (compression)	226 to 2268	KgF
Absolute maximum force	4536	Kg
Frequency range	10	KHz
Non-Linearity	≤ 1	% FS [1]
Temperature Range (Operating)	-10 to +60	°C
Excitation Voltage	20-30	VDC
Constant Current Excitation	2-20	mA
Output Bias Voltage	4-8	VDC
Housing Material	4140 Tool steel	type
Electrical Connector	SMB Coaxial Jack	type
Size	machine specific	
Weight	machine specific	

OES TECHNOLOGIES

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.