KCF technologies

Hardware at-a-Glance:

Piezo Sensing

Piezo Sensing, part of the SMARTsensing suite of hardware products, expands the already robust capabilities of the KCF Technologies Comprehensive Machine Health Platform.

Large, slow rotating equipment, such as paper machines, can often present challenges when monitoring using traditional methods. When equipment moves slower, advanced methods are needed to accurately track and prevent machine failures. Piezo Sensing solves this problem by using advanced enveloping technology – a processing method that isolates and highlights impacts, making accurate detection possible – Piezo Sensing enables you to monitor your most critical equipment, regardless of speed all within one platform.

Use Cases:

1. Slow Rotating Equipment
2. High Monitoring Point Density Locations
3. Integrating Legacy Sensors
4. Extreme Temperatures

Piezo Sensing is Part of the KCF

SMARTsensing Suite *Powering Better Monitoring Capability for Your Critical Assets Than Ever Before.*

Key Features:

Enhanced Bearing Fault Detection with Enveloping: Without the right solution, picking up the minute, high frequency impacts arising from bearing wear can be difficult to detect. Piezo Sensing isolates and highlights high-frequency components for superior bearing fault detection.

By leveraging advanced high frequency enveloping, Piezo Sensing excels in isolating and accentuating even the most subtle impacts caused by bearing wear. This capability is crucial, as without the right technology, these minute yet critical symptoms can easily go unnoticed. Piezo Sensing's implementation of enveloping ensures that these signals are captured consistently and reliably. Providing unparalleled precision in bearing fault detection and ensuring the reliability and longevity of your equipment.

Ideal for Slow-Rotating Equipment: With its exceptional high-speed sampling capabilities, Piezo Sensing records 96,000 samples per second, ensuring the precise detection of even the subtlest bearing faults. This, combined with its ability to support extended sampling durations, makes Piezo Sensing uniquely adept at monitoring equipment operating at ultra-low speeds, down to 2 RPM. Such comprehensive coverage ensures that even the earliest signs of potential issues are captured, facilitating timely intervention, and preventing minor faults from escalating into major failures.