VibePro
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B&D INDUSTRIAL
Serving Industry Since 1947

24/7

System Specifications
Engineering & Design

Downtime

» Downtime production losses range from 5% to 20%
» 80% of plants have had an unplanned outage (last 3 years)
» The average length of an unplanned outage is four hours
» Unplanned maintenance cost 3 to 5 times more
» Determining root cause failures is more difficult

FM APPROVED

c UL US
UL 508A

FC

TIMKEN BEARING CERTIFIED

ABB
VALUE PROVIDER

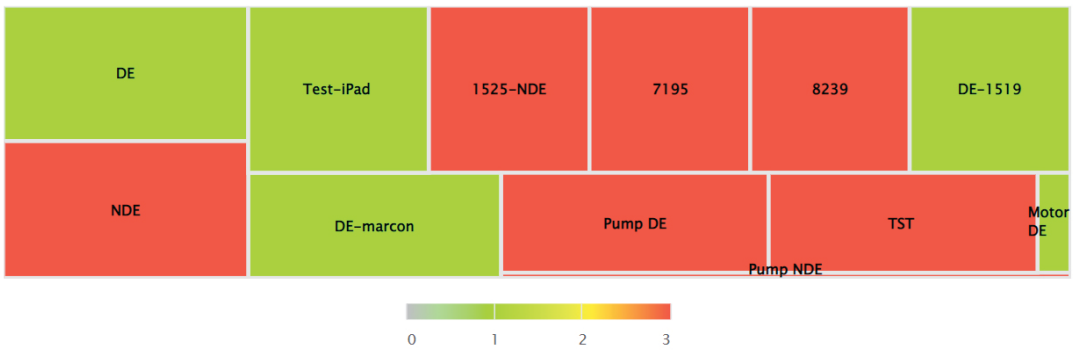
AGMA

3 PART SOLUTION

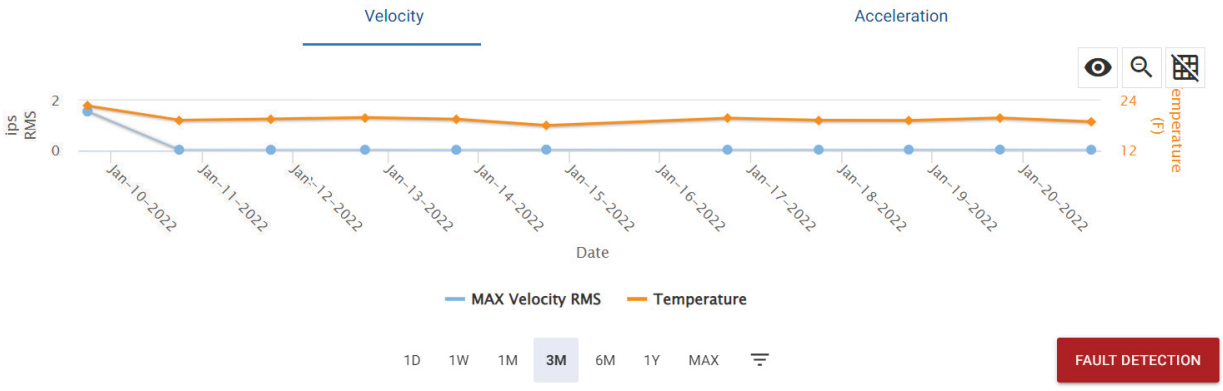
Why ours is Better

» Max of 25,600 samples per second
» IP69K sensors and N4X UL508A base stations
» FM Class 1 Division 2 standard in all sensors
» 10+ year batttery life - best in the Industry
» Hybrid cloud and route based data capture

Machine Condition Heat Map



Machine Overall Vibration Trend



Sensor Specification	Data
Frequency response	6400 Hz +/- 3 dB 12800 Hz +/- 5dB
Radio	2.4 GHz ISM band proprietary
Sensitivity	<1mg
Axis Selectable for enhanced resolution	1 axis 12800 Hz fMax 2 axis 6400 Hz fMax 3 axis 3200 Hz fMax
Spectral lines	Unlimited (based on sample window length and time)
Samples per acquisition	Infinite (based on sample window length and time)
Sample rate	3200 sps to 25600 sps configurable
Ingress protection	IP69K
Mass	80g with battery
Enclosure material	Fiber filled polymide Anodized aluminium base Coated brass retainer
Range to base station	Omnidirectional antenna 300'+ LOS Directional antenna 800'+ LOS
Power source	2 x AA 1.5V lithium battery (replaceable and non-exotic)
Battery life	10+ Years life Excessive heat reduces life
Sensor range	+/- 30g nominal
Sensor temperature range	-40°to 257°F
Factory mutual approval (FM)	Class 1 Division 2

Base Station Specification	Data
Mechanical	8.00 in x 10.00 in x 5.00 in 2.2lbs
Radio	Storage -40° to 248°F Operation -40° to 176°F Nema 4X (IP67) UL508A Materials polycarbonate
Power	PoE including IEEE802.3.AF, 802.3.AT, 802.3.BT Power 3W
Wiring	Cat 6 Ethernet via standard cable or RR-125300-03-Z3 compatible sealed connector
Data Reliability	Offline data caching: 32GB - 1TB (depending on included storage)

Other Features

» User determined collection schedule
» Automated emails and alerts
» Per sensor customized collection schedule
» Trending in peak, RMS, and crest factor
» Velocity, acceleration, displacement, & demod
» VibePulse automatic fault detection algorithm
» Stainless, PoE injector, and cellular modem base station designs available
» Infinite site arrangements with base stations and sensors

Base Station Enabled Axis	Possible Combinations	Turbo Mode	Packet Data Rate	Sampling Rates
3	X, Y, Z	Disabled	800 packets/seconds	3200 sps
3	X, Y, Z	Enabled	711 packets/seconds	6400 sps
2	X, Y	Disabled	914 packets/seconds	6400 sps
2	X, Y	Enabled	914 packets/seconds	12800 sps
1	X or Y or Z	Disabled	914 packets/seconds	12800 sps
1	X or Y or Z	Enabled	914 packets/seconds	25600 sps

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