



Condition Based Monitoring

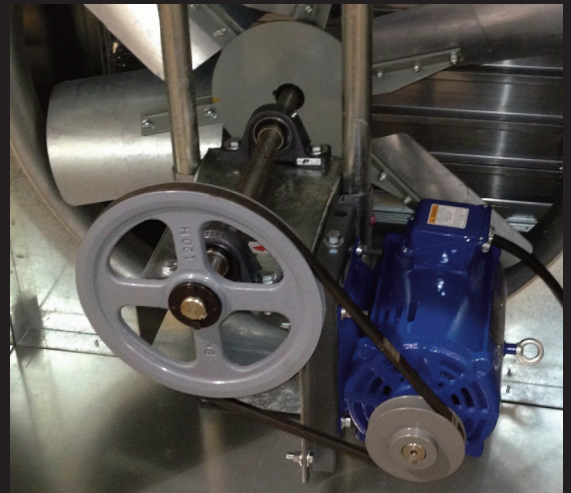
Tools to monitor, analyze & interpret vibration.



Smart Vibration Analyzers: Analyze • Interpret • Save

Condition based maintenance (CBM) is not just a technique for avoiding breakdowns. By identifying faults such as out of balance, misalignment, worn bearings etc. you can significantly reduce operating costs:

- Lower energy costs (out of balance and misaligned machines need a lot more unnecessary energy)
- Prolong component lifetimes (e.g. by reducing bearing wear)
- Lower repair costs (replacing worn bearings before they fail is much cheaper and safer!)
- Reduce downtime (increase profitability)



TPI 9080 Interpret and TREND

- Identify the vibration problem: 2/10 Hz to 1 kHz for a clearer understanding of unbalance, misalignment or looseness.
- Vibration values are displayed with color-coded alarm levels for ISO values.
- User-settable alarm levels for easy identification of the bearing condition - displayed as a BDU (Bearing Damage Unit) value.
- 1 kHz to 10 kHz covers the bearing condition to identify bearing wear, damage, lubrication issues, etc.
- Identify complex issues: 800-line spectrum with zoom and cursor.
- Use VibTrend Software to store, analyze and report on all vibration parameters - all in one place. Create maintenance routes and trend lines to show where problems might be developing.



9084 Smart Trend Analyzer With Wireless Charging

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MEASURE • MANAGE
Solutions for Pumps, Fans & Motors

If you have Pumps, Fans and Motors you need TPI Vibration Analyzers!

Traditionally vibration analysis has been a specialist field and typically performed by vibration consultants using very expensive equipment. Vibration analyzers from TPI

allow anyone to perform meaningful vibration analysis at an unexpectedly low cost. Easily and affordably detect worn bearings, faulty gearboxes, unbalance,

misalignment and looseness. By detecting early signs of machine failure, machinery can be repaired or replaced before an expensive breakdown occurs.

TPI 9070 Vibration Analyzer: analysis simply at the touch of a button!

TPI 9070 analyzes & interprets readings:

- ISO machine alarms and Bearing Damage Units (BDU) reading indicate overall machine and bearing condition
- Clear picture of 1X, 2X & 3X machine problems detects imbalance, misalignment and looseness
- 800-line spectrum with zoom and cursor to identify complex issues



TPI 9071 Smart Vibration Analyzer with BNC cabled accelerometer with magnet for consistent readings

TPI 9071 analyzes, interprets, and stores readings.

Everything the 9070 can do plus:

- BNC cabled accelerometer with magnet for hard to reach test points and repeatable results
- Collect and store readings; 10 memory blocks with 20 readings per block for a total storage of 200 readings.
- Stored data is easily recalled and displayed.



TPI 9080 Smart Trend Analyzer

TPI 9080 analyzes interprets & trends readings.

Everything the 9071 can do plus:

- Asset management and trending with included VibTrend software. Ten assets with ten readings per asset.
- VibTrend Pro license allows an unlimited number of assets with ten readings per asset.



Pumps

This style pump can have bearing problems or balancing issues. The motor is bolted directly to the pump and does not normally have alignment issues.



Motors

The motor and pump are bolted to the frame and attached with a coupling. This can present bearing problems in the motor and pump, balancing issues due to damaged impellers, and also shaft misalignment between the two.



Fans

Fans can also have bearing and balancing problems. A fan can be out of balance due to damage, dirt, or thrown weight. A bent shaft will also create a balance issue.



Selection Guide: what features fit your application?

Features	9070	9071	9080	9084
Analyzes and displays ISO vibration levels, bearing wear, unbalance, misalignment and looseness	✓	✓	✓	✓
Color coded display with alarm status (red, amber, and green)	✓	✓	✓	✓
Fully zoom-able frequency spectrum	✓	✓	✓	✓
Computer interface	-	-	USB	USB
C-Trend software to store analyze and report vibration, lube, and inspection parameters (temperature, oil pressures, run hours, etc.)	-	-	Optional	Optional
VibTrend software for data trending and analysis	-	-	✓	✓
Automatic reporting and email generation of alerts for any parameter	-	-	✓	✓
Bluetooth enabled	-	-	✓	-
Bluetooth headphones (optional, p/n A9080)	-	-	✓	-
Strobe accessory (optional, p/n A9082)	-	-	✓	-
Accelerometer connection	Built-in with stinger (magnet optional)	BNC, uses IEPE accelerometers	BNC, uses IEPE accelerometers	5 pin MIL, uses low power accelerometer
Input range	+/- 50g	+/- 50g	+/- 50g	+/- 50g
Frequency ranges	2Hz to 1KHz 2Hz to 10KHz	2Hz to 1KHz 2Hz to 10KHz	2Hz to 1KHz 2Hz to 10KHz	2Hz to 1KHz 2Hz to 10KHz
Frequency resolution	100, 800 lines FFT	100, 800 lines FFT	100, 800, lines FFT	100, 800, lines FFT
Displayed frequency units	Hertz (Hz), RPM, CPM	Hertz (Hz), RPM, CPM	Hertz (Hz), RPM, CPM	Hertz (Hz), RPM, CPM
Displayed amplitude units	Acceleration in g Velocity in mm/s or inches/s	Acceleration in g Velocity in mm/s or inches/s	Acceleration in g Velocity in mm/s or inches/s Displacement in microns or mils	Acceleration in g Velocity in mm/s or inches/s Displacement in microns or mils
Dynamic range	72dB	72dB	96dB	96dB
User interface	Keypad	Keypad	Keypad	Keypad
Environmental rating	IP67 Waterproof	IP67 Waterproof	IP67 Waterproof	IP67 Waterproof
Operating temperature	32°F to 122°F (0°C to 50°C)	32°F to 122°F (0°C to 50°C)	32°F to 122°F (0°C to 50°C)	32°F to 122°F (0°C to 50°C)
Power supply	AA Batteries (2)	AA Batteries (2)	AA Batteries (2)	Rechargeable Lithium Ion
Wireless recharging	-	-	-	✓
Battery life	20 hours typical	20 hours typical	20 hours typical	20 hours typical
Size	8" x 2.4" x 1.3" (203mm x 61mm x 33mm)	8" x 2.4" x 1.3" (203mm x 61mm x 33mm)	8" x 2.4" x 1.3" (203mm x 61mm x 33mm)	8" x 2.4" x 1.3" (203mm x 61mm x 33mm)
Weight (unit only)	9.8oz (280g)	9.8oz (280g)	9.8oz (280g)	9.8oz (280g)



TPI is Your Vibration Monitoring Source, Accessories and More.

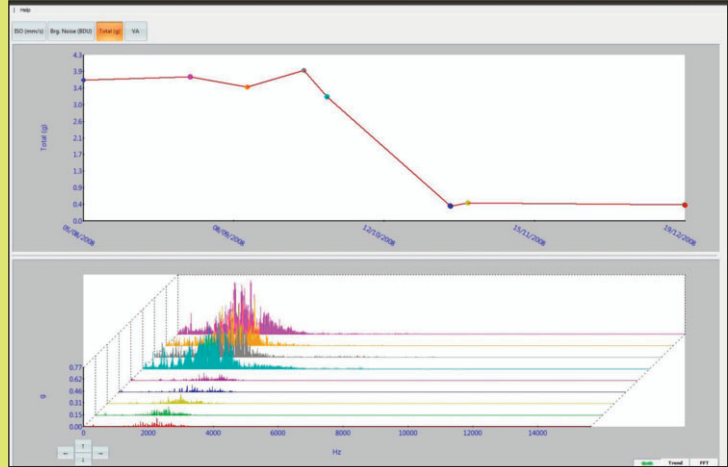
VibTrend Pro Software

included with 9080K1, 9080K2 and 9084.

Powerful, easy-to-use asset management and fault diagnosis ability.

VibTrend Pro Software gives you greater flexibility & options. Windows™ compatible.

- Store, analyze and report on all your vibration parameters in one place; unlimited assets with ten readings per asset.



A9080 Bluetooth® Headset

Industry approved ear defenders with built-in-Bluetooth headphones allow you to listen to the bearing noise. Also use with your smart phone. Comes with the 9080K2 kit and can be ordered separately.

For use with 9080 only



A9082 Strobe

Stroboscope/flashlight attachment used to determine the speed of rotating equipment. Included with 9080K1 and 9080K2 kits.

For use with 9080 only



377BT Infrared Thermometer

- Bluetooth Communication
- Laser Sighting to confirm target.
- Adjustable emissivity for maximum accuracy on all surfaces.
- °F or °C Selectable
- 11.5:1 Distance to Spot Ratio
- 3 Year Limited Warranty
- Temperature Range: -58 to 1,832°F
- K-Type thermocouple input for optional K-Type probe measurement.
- 0.1 Degree Resolution provides increased accuracy of reading.



505L Digital Handheld Tachometer

Combination photo and contact tachometer that also measures surface speeds of belts and wheels. Up to 25 feet in photo target mode.

- Measure motor input and output shaft speed
- Determine conveyor belt speed
- Confirm fan, motor, and gear RPM
- Measure RPM of flywheels and pumps
- Monitor pulley rotation RPM and turbine speeds

Features

- Target (photo mode) is 25 feet
- Multifunctions: Photo Tach & Contact Tach & Surface Speed
- Wide Measuring Range: 6 to 30,000 RPM
- Last Value, Max Value, Min Value: automatically saved and recalled
- 3 Year Limited Warranty



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