

Reliability Made Easier By Design

“When analyzing accidents of near-miss events, i.e. occasions that could easily have led to an accident, one typically finds that 75-90% of them are based on human error rather than equipment failure. Human error can be reduced by applying usability principles.”
- Christian Osterbauer,
Maximillian Lackner,
and Gerald Weinberger

What if...

- Your analyzer was comfortable and easier to use?
- You could complete your routes faster?
- You could use technological advances to do your job better?

On days you perform route-based vibration analysis, the vibration analyzer you carry becomes your desk, your tool box, and your partner. But the analyzer is not the focus of your job, it is the means to an end. You need an analyzer that is efficient, isn't too heavy for a day in the field, has a battery life for a complete shift, is durable, and delivers the technological conveniences you expect.

What does your current vibration analyzer offer you? Do any of these painful situations sound familiar?

YOUR ANALYZER IS UNCOMFORTABLE

While you are on your route, your analyzer slips, rubs, and hangs heavy on your neck and shoulder. You keep safety in mind, but the cable between your analyzer and headset often comes close to getting caught on equipment. Your eyes strain to make out vibration plots on the small screen if you can see them at all in the bright sunlight or the dark areas of the plant. At the end of the day, your hands and back ache from balancing and holding it for an extended period.



YOUR ANALYZER'S LIMITATIONS IMPACT EFFICIENCY

You have many machines on your route and only so much time, but to measure the vibration for each bearing, you must move the sensor and press enter three times (once for each axis of vibration). In addition, between each measurement you need to wait to give the sensor time to settle. Each measurement requires you to push multiple buttons and arrows, and the cursor movement is slow. Often the environmental conditions are less than ideal — either too hot or too cold, loud, dirty, and hazardous. You want to get in and out as quickly as possible, yet you need to get all the data needed to keep your equipment performing well. Sometimes the collection takes so long that you can't finish all the machines in a single shift.

NEW TECHNOLOGY CONVENIENCES ARE NOT AVAILABLE

When you aren't at work, your phone acts as a multi-purpose tool — allowing you to call, text, check the score of the game, and even submit an insurance claim. So why can't your expensive tools at work use technology advancements to make your job more efficient? Your analyzer will not allow you to send the collected data to the database. You must walk back to the office, connect the analyzer and download the data. You spend too much time doing low value, time-consuming work instead of focusing on analysis of your data that can help solve the issues on your machines.

SIMPLIFYING VIBRATION ROUTES

COMFORTABLE DESIGN MAKES WORK EASIER

The CSI 2140 Machinery Health Analyzer is significantly thinner than other analyzers on the market. With a comfortable strap designed to stay in place — and adjustable to right- or left-handed users — the CSI 2140 allows you to focus on your job rather than on finding a comfortable position. The large screen allows you to see up to four channels of vibration data plots clearly, so you can even perform analysis in the field. As you move between areas of the plant, the screen auto-adjusts its brightness to the ambient light, so you don't strain your eyes. And with wireless Bluetooth accessories, you are not surrounded by connected cables that can pose safety hazards.



“Sometimes I carry my analyzer for 8 or more hours and my shoulders ache at the end of the day. This CSI 2140 is much lighter and well balanced – I hope to not have that problem anymore.”

Jim Crowe,
Machinery Health Consultant

QUICKER ROUTES WITH EFFICIENT TOOLS

Because the CSI 2140 offers four-channel monitoring and a triaxial accelerometer, one measurement action collects data for all three axes. In addition, you can measure multiple bearings simultaneously — significantly streamlining other advanced diagnostics. Trials show that route-based analysis using the four-channel CSI 2140 is finished at least 30% faster than using other analyzers. You can get the measurements you need quickly and get out of the uncomfortable environmental conditions. You will also be able to cover more machines during your shift, so you can focus on more high value tasks.

ADVANCED TECHNOLOGY IMPROVES EFFICIENCY

As you finish collecting the current route, simply transmit the data wirelessly to the database. A colleague back in the office can immediately begin analysis, enabling the team to do collection and analysis in parallel. Or when back in the office wirelessly upload the data to the database without the need to connect cables to the PC. Deeper analysis can even begin in the field as the touchscreen allows you to zoom in on specific areas of a trend or waveform. You can often troubleshoot issues right next to the machine and run up to 14 additional diagnostic tests if something in the route data warrants a deeper look. No need to return to the machine later to run additional tests because you can easily pinpoint issues in the field.

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