

SKF Idler Sound Monitor Kit

CMXA 45-ISM-K-SL

Detect conveyor idler faults with the SKF
Microlog Advisor Pro Idler Sound Monitor kit



In many industries, conveyors are an important part of a material handling system especially in mining and cement industries. Failure of an idler can lead to belt damage, expensive downtime and lost production. The SKF Idler Sound Monitor Kit was developed for early detection of faults in conveyor support and return idlers. Using acoustic enveloping technology, the SKF Idler Sound Monitor Kit distinguishes between the sounds of a good idler and a faulty one. It can detect faulty idlers earlier and more reliably than, for instance, when a maintenance worker walks the length of the conveyor belt to listen or look for problems. The kit also provides shorter measurement time and earlier fault detection than a thermographic camera.

With the Idler Sound Monitor module, the screen of the SKF Microlog displays a simple to understand “traffic light” visual alarm:

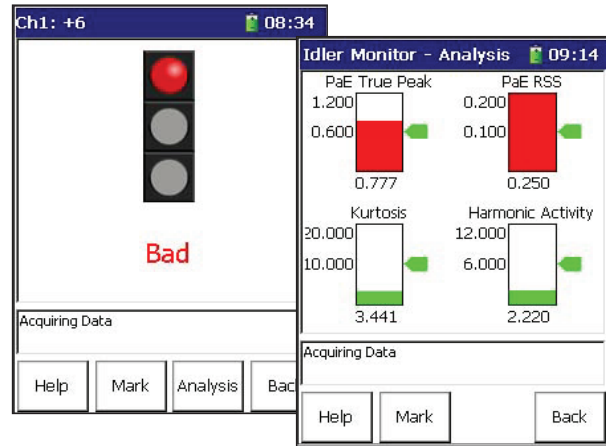
- Green for OK
- Yellow to indicate a “suspect” idler
- Red to indicate a “bad” idler

The kit includes a microphone encased in a rugged parabolic holder for aiming at the

idlers. Headphones issue an audible alarm for fault detection and allow the user to listen to the idler as an additional aid to diagnosis. It is so easy to use that even inexperienced workers are able to detect faults with minimal training. For further fault detection or analysis, the SKF Idler Sound Monitor kit also includes the FFT Analyzer module. When a faulty idler is identified, the FFT Analyzer module allows you to quickly set up spectral / phase measurements for further fault detection. FFT Analyzer module data may be stored in the SKF Microlog Advisor Pro for future review, and can be transferred to the host computer in comma separated value format (.csv) for import and analysis into the Analysis and Reporting module or spreadsheet applications such as Microsoft Excel.

With reliable detection up to 3 meters (10 feet) away while walking the belt (under optimal conditions), the SKF Idler Sound Monitor Kit provides maintenance workers





with a safe to use and objective tool for idler inspection. The kit serves as an alternative to traditional “walk arounds” that depend on the skill of the worker to listen and recognize a faulty idler. The instrument can be used with one hand, and therefore, complies with safe procedures for three-point contact while working in a plant or mine. Because the microphone can detect faulty idlers on the far side of the belt, there is no need to walk both sides of it. This positions the worker during the measurements at a safe distance from the moving conveyor belt.

Benefits

- Early detection of faulty conveyor idlers
- Helps avoid unplanned downtime
- Helps avoid costly belt damage and hazardous repairs
- Offers safer, easier inspection compared to traditional conveyor belt walk arounds
- Can be used as part of an operator driven reliability (ODR) maintenance program
- Includes FFT Analyzer module for further diagnosis

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Ordering information

The **CMXA 45-ISM-K-SL** SKF Idler Sound Monitor kit consists of:

- SKF Microlog Advisor Pro
- Idler Sound Monitor module
- FFT Analyzer module
- Parabolic reflector [CMAC 5141]
- Adapter plate assembly [CMAC 5142]
- Parabolic windjammer [CMAC 5143]
- ICP microphone [CMAC 5091]
- Audio headphones, hard hat compatible [CMAC 5403]
- Audio headphone cable [CMAC 5078]
- BNC to Fischer cable
- Shoulder and hand strap
- USB communication, power cable [CMAC 5019]
- Universal power supply [CMAC 5090]
- Battery pack [CMAC 5031]
- User manual [CD]

Software options

- The Idler Sound Monitor data can be transferred to the host computer in comma separated value format (.csv) for import into spreadsheet applications such as Microsoft Excel or into Microsoft Word tables.
- The FFT Analyzer module data can also be transferred to the host computer in comma separated value format (.csv) for import into spreadsheet applications, as well as into the SKF Analysis and Reporting module.

Product Support Plans

SKF is committed to providing the highest degree of customer support in the industry. Product Support Plans (PSP) extend the standard product warranty for an additional length of time to continue your unlimited access to Technical Support, global repair coverage and more.

Protect your investment

Product Support Plans help to make sure that your equipment is maintained to the highest standards. Condition monitoring products are an investment, and a Product Support Plan is a great way to protect your investment for years.

