



## MHC Bearing checker

- Low cost analysis of machinery condition
- Easily interpreted results
- Field-proven technology

# Small, hand-held instrument gives you instant indication of machinery condition

Kittiwake Holroyd's MHC Bearing Checker is a new, unique hand-held instrument, providing maintenance engineers with an easy to operate, simple to use and quick method of analysing bearing condition and lubrication state.

The MHC-Bearing Checker monitors high frequency Acoustic Emissions (AE) signals naturally generated by deterioration in rotating machinery. The unique way of detecting and processing these signals gives you condition-related information in the easiest possible form. It is a state-of-the-art Condition Monitoring instrument with extreme sensitivity to developing faults.

## How does it work?

As the mechanical condition of machinery deteriorates, energy loss processes such as impacts, friction and crushing, generate sound wave activity that spans a broad range of frequencies. By detecting only the high frequency part of this signal with special AE sensors, it is possible to detect minuscule amounts of activity (e.g. a slight rub, a brief impact or the crushing of a single particle in the lubricant). The patented MHC sensor gives improved repeatability and is remarkably rugged. A magnetic front face allows easy attachment to multiple machines.

## Easy to use and interpret parameters for quick analysis.

Simply attach the unit via the magnetic sensor head and within 10 seconds both dB Level and Distress<sup>®</sup> values will be displayed. dB Level is an indication of the overall noise of the bearing and is dependent on speed. It increases with speed of rotation, but also with degradation of the bearing or inadequate lubrication. Distress<sup>®</sup> gives an instant indication of the state of the bearing's health. A reading below 10 generally indicates normal operation, higher than 10 is usually indicative of bearing damage or the need for attention.



Distress<sup>®</sup> and dB Level are the fundamental parameters of the high-end MHC-Memo products offered by Holroyd and trusted by thousands of maintenance engineers and technicians. These are now available in a low cost, easy to interpret pocket size instrument.

The unit is powered by an internal rechargeable battery, offering up to 1000 measurements between charges. Recharging is accomplished through a micro USB port and the unit can be connected to any standard PC USB port for ease of recharging. Can you afford not to equip all of your maintenance staff with a unit?

## Specifications

### Sensor

Sensing element	Resonant piezoelectric at ~ 100 kHz
Calibration	Factory set

Signal Measurement	Description	Range	Resolution
Distress <sup>®</sup> (dst)	Fault indicating parameter	0 to 40	1 unit
dB Level (dB)	Logarithmically scaled mean signal level	10 to 80 dB	1 dB

### Features

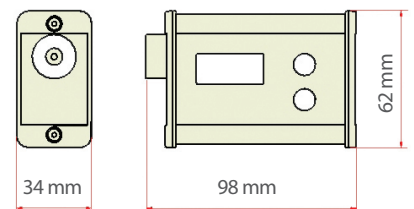
Display	LCD, 2 lines by 8 characters
Distress <sup>®</sup> Display	Numeric or Text ("OK" if <10, "Suspect" if between 10 & 15, "Poor" if >15 )
Reading in progress	Flashing LED indicator (in addition to LCD display message)
Non-Volatile Memory	Shows last taken readings when unit is switched on
Auto Shut-Off	Instrument auto switches off 30 seconds after last button press
Internal Batteries	NiMH rechargeable battery via micro USB port - Typically over 1000 measurements between charges
Operating Temperature	0°C to 65°C
Overall Dimensions	98 mm x 62 mm x 34 mm (including magnetic sensing head)
Weight	225 g

## Features and Benefits:

- Last measurement recall
- Simple one-handed operation
- Rechargeable through USB port
- Ease of operation

## Target Applications:

- Bearings
- Gearboxes
- Motors
- Pumps



### About Kittiwake Holroyd Ltd

Holroyd are part of the Kittiwake group of companies. If your business is about condition monitoring of machinery, maintenance of industrial fuels and lubricants or monitoring of exhaust gases then Kittiwake operate in your field of expertise. Established in 1993, Kittiwake has grown into a leading global provider of monitoring and testing technology solutions with offices in the UK, Germany, USA, India and Asia. Innovative technology solutions that make a real difference to your operations. Have a look at our information centre on [www.condition-monitoring.com](http://www.condition-monitoring.com) for hints and tips on how to maximize the benefits from your maintenance budget.



Kittiwake Holroyd Ltd  
Via Gellia Mills  
Matlock  
Derbyshire  
DE4 2AJ

Tel: +44 1629 822060  
Fax: +44 1629 823516

[sales@kittiwakeholroyd.com](mailto:sales@kittiwakeholroyd.com)  
[www.kittiwakeholroyd.com](http://www.kittiwakeholroyd.com)