

AT LAST—AN EFFECTIVE CM INSTRUMENT THAT'S SIMPLE TO USE



MHC-Memo

The Data Logging Machine Health Checker



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Simply Outstanding

The MHC-Memo is a quantitative Acoustic Emission (AE) system which automatically characterises the high frequency AE signal in terms of the proven 'Distress' and 'dB Level' parameters.



MHC-MEMO features rubber casing for use in harsh environments

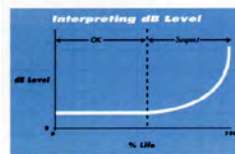
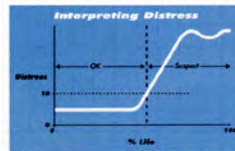
The simplicity and speed of this approach should not be underestimated. The MHC-Memo achieves an exceptional sensitivity to a broad range of fault types whilst being applicable to an astonishingly wide range of machinery. You won't believe CM can be this simple or effective until you've seen it demonstrated or tried it for yourself.

Because the MHC-Memo is not based on FFT's and spectral analysis it retains a straightforward simplicity that cannot be matched by even the best of Vibration based CM instruments.

The MHC-Memo detects and analyses the high frequency (~ 100 kHz) component of the structure borne sounds generated by energy loss mechanisms such as friction and impacts which are naturally produced by rotating machinery in poor condition.



The power of AE is that it directly detects the processes of mechanical degradation whilst being insensitive to the general noises and vibrations of normal running. As a result the MHC-Memo can be applied to virtually



all rotating machinery, including those areas where vibration techniques, are difficult to apply, such as slow speed [down to 45 rpm], plain bearings and complex gearboxes. Its even

sensitive enough to pick up lubrication problems before any significant damage has arisen.

The MHC-Memo characterises the detected signal in terms of Distress and dB Level. Distress is a proprietary parameter which performs a summation of all the microscopic clicks, crunches, whistles and groans associated with faults. In this way Distress provides a means of instantly recognising suspect machinery at a very early stage. By contrast dB level is a measure of the overall signal level and is used to trend the rate of degradation of suspect machinery.

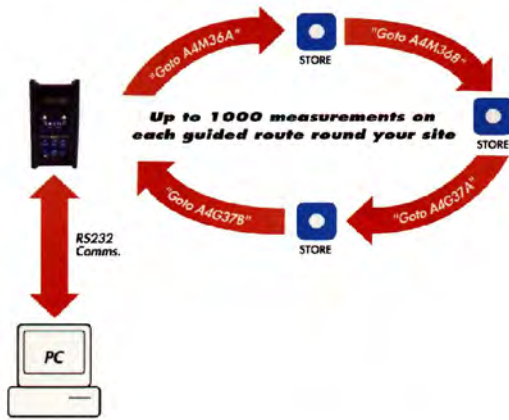
In fact the MHC - Memo works on the same basic principles that have been well proven over the years in the original MHC - Machine Health Checker.

Key points

- Instant identification of suspect machinery
- operates down to low rotational speeds
- early fault detection
- simple to interpret readings
- applicable to a wide range of machine types
- insensitive to high vibration & noise environments
- quantitative measurement

Simply user friendly

The MHC-MEMO combines powerful data-logging and bi-directional PC communications with a straight forward user interface.



With software to simplify data-taking...

Using a PC you can customise the MHC-Memo so that your measurement points are easily recognisable and follow your preferred route. Although the last route is retained in memory when data is uploaded to the PC (or even erased you are free to create as many routes as you wish (eg one for each site) just download the appropriate route at any time before you set out to take measurements.

...and software to simplify interpretation.

Whilst ease in taking measurements is important it is also vital to be able to quickly identify problem areas and see at a glance how rapidly machinery is deteriorating. Here the unique Distress parameter comes into its own, immediately



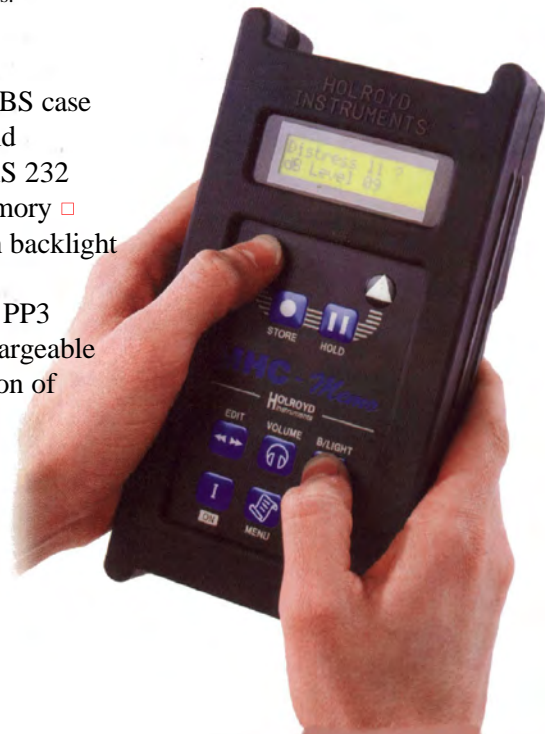
MHC-MEMO is rugged & water resistant

drawing your attention to suspect machinery (typically defined as Distress > 10) without the need for you to set a machine specific alarm level or have experience of previous failures. On these suspect machines the trend of dB Level can then be viewed to give a clearer picture of its rate of degradation (see separate data sheet on analysis software)

Simply perfect

Designed for ease of use, wide applicability and built to survive the industrial environment the MHC-Memo delivers on all fronts.

- Features.**
- Tough ABS case
 - Protective rubber mould
 - Headphones socket □ RS 232 comms
 - 1000 point memory
 - clear LCD (display) with backlight
 - includes auto shut-off
 - › save power
 - runs off PP3 batteries (normal or rechargeable)
 - 6 character identification of measurement points



Measurement mode

This is the default mode of the MHC-Memo giving a live display of the current values of Distress & dB level

Distress 14 ?
dB Level 32

Store Mode:

Lets you store readings in your customised route either with auto-incrementing or allowing you to skip points.

Store PMP62A
[yes] [No]

Edit Mode:

Allows you to roam through the memory looking at stored values, re-taking them if you wish etc.

Dst: 14 db Lev 32
[-] PMP62A [+]

Data Transfer Mode:

And when you've taken the data simply squirt the numbers into your PC, it couldn't be simpler.

Upload points
[yes] [no]

