



## WebLog Expert® Condition Monitoring Software

WebLog Expert® is Bachmann’s client based software tool, which allows detailed analysis of vibration data and gives access to configuration of the system parameters for Bachmann hardware. As a client software it must be installed on the users’ PC, and as such is licensed software.

The package provides a comprehensive range of facilities for alarm handling, trend data display, data correlation, diagnostic data interrogation, and Failure Mode Symptoms Analysis support and severity analysis.

Configuration tools are provided to set up the monitoring hardware and the appropriate data processing routines for advanced analysis techniques.

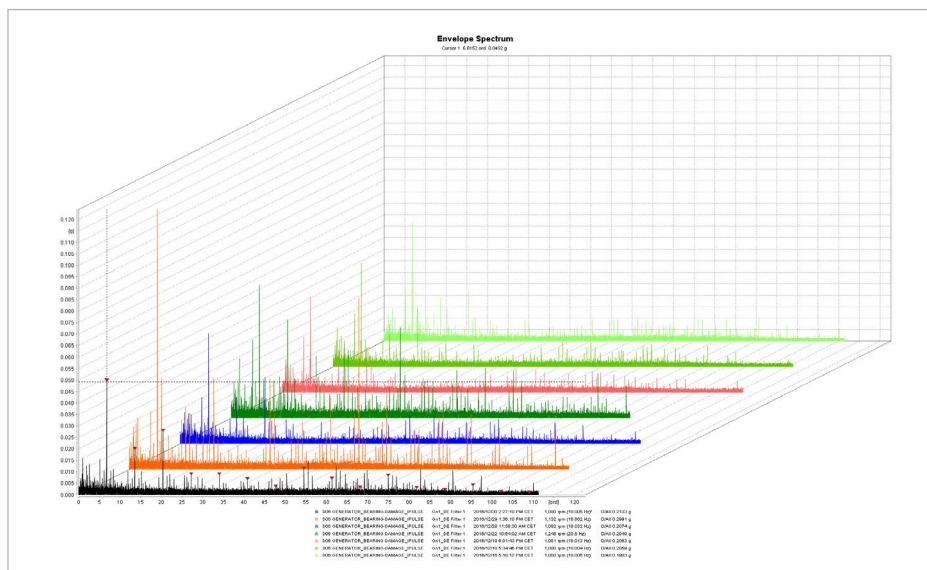
This is the same software package as our remote monitoring team use for their work, including commissioning and investigations as well as routine monitoring. The database server(s) used are those which drive WebLog, so customers who wish to use these advanced diagnostic capabilities need not host data themselves.

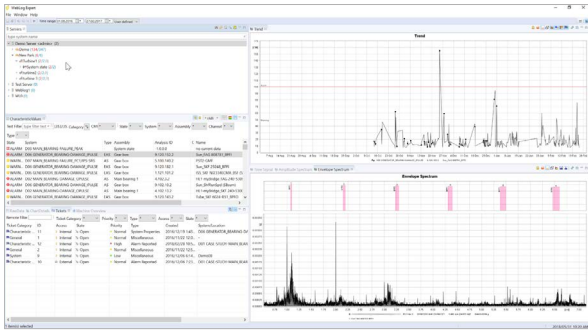
### Features

- Advanced analysis and diagnostics
- Allows you to access the full power of your condition monitoring system
- Configuration of all the data collection and analysis parameters
- Powerful alerting and trending options
- Fully integrated with Weblog
- Cloud compatible

We also offer training to help people understand all the capabilities and possibilities available within this Software, which is intended for expert use.

Item	Item-No.
Full Service	00034994-00
WebLog Expert® License	00024942-63
WebLog Expert® Training	00031831-00

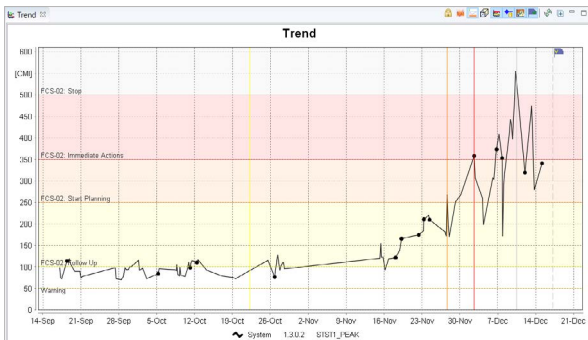




### Weblog Expert® in use

The turbines are accessed via a tree structure – although a map based selection may also be used if preferred.

On selecting a specific turbine the user has access to the Characteristic Values (CVs) used for diagnostics, and can filter appropriate to the preferred workflow.



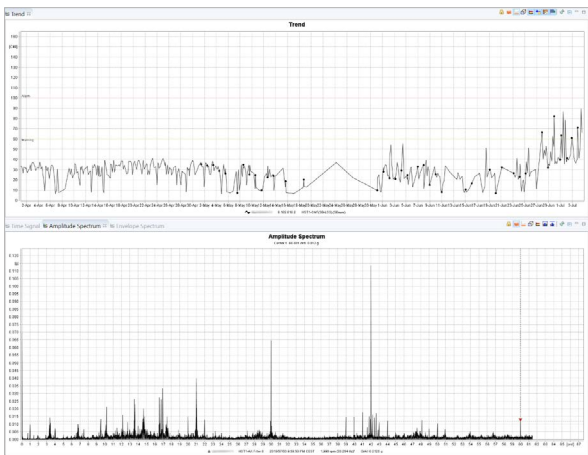
### Graphics and trend functions

Trend data can be configured to provide information about fault severity, and tools to compile fault severity statistics are available.

As soon as a CV is selected the trend and the latest individual measurement are shown.

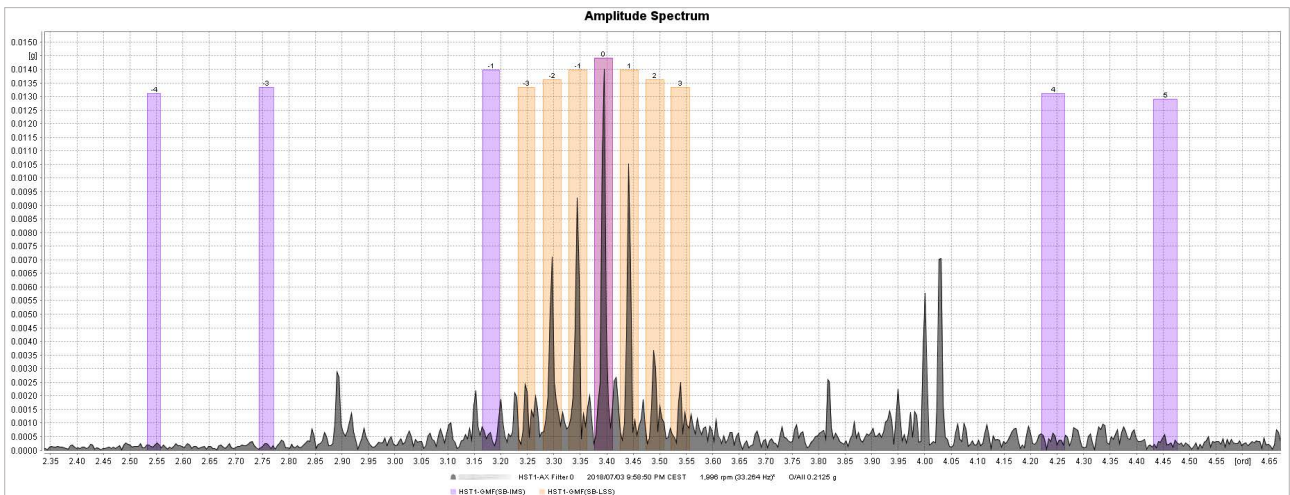
From a trend graph, the user can move directly to the raw time signal or spectral data underlying the CVs.

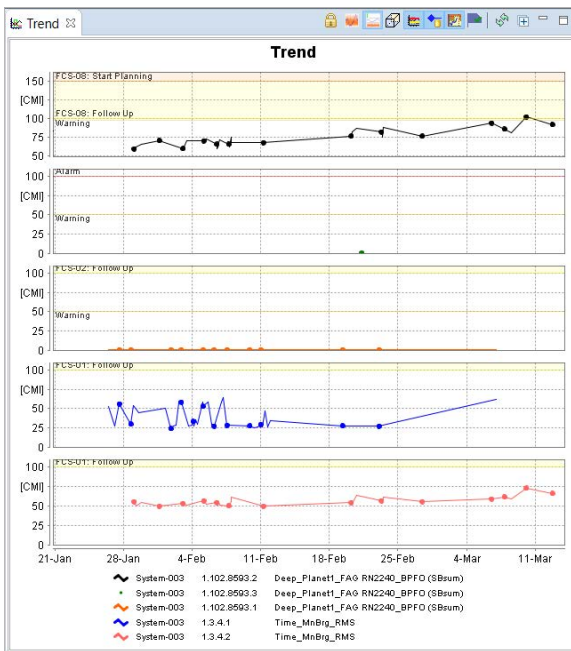
The kinematic frequencies associated with the CVs can be overlaid on the plots, or alternative kinematic frequencies associated with other parts of the machine selected.



Specific frequencies can be selected and a trend of these frequencies back-calculated.

Data from multiple turbines can be overlaid allowing cross farm or cross fleet comparisons to be made, assisting with diagnostics and making the job of the analyst easier.





### Display facilities and data API

All the usual display facilities of zoom, cursors, overlays of multiple turbines or channels and X-Y plotting are available. A data API is also available to allow downloading of data for those who wish to develop their own algorithms. A waterfall plot is available, which can be rotated to the optimum display angle to show the required part of the spectrum.

There is also a feature to define failure mode symptoms groups, so that a number of related CVs can be tracked simultaneously.

### Template system

As an integral part of our monitoring process WebLog Expert® gives full access to our commission tools. This is supported by a template system whereby the settings for a single turbine can be saved and transferred to similar machines.

The system can also generate suggested values for thresholds, to speed up the commissioning process and ease the setting of deadbands when alarms have fired.

Deadbands are a mechanism to ensure that any alarms which are currently under surveillance do not proceed too much further before a reminder is sent.

### Ticket system

The software also provides full access to the ticket system, into which graphics files can be directly copied, and supports automated report generation onto user specified templates.

demo-3-c154-GF15@Development Server

Advanced Threshholds Error status: No Errors Lock status: Checked in

General Channels Components

Active Channels: type filter text

- SVI
- AIC212 Module
- AE 1-MN-BRG1-AX
- AE 2-MN-BRG1-MYB
- AE 3-MN-BRG2
- AE 4-PST1-MYB
- AE 5-PST1
- AE 6-HST1-AX
- AE 7-HST1
- AE 8-GEN1-DE
- AE 9-GEN1-NDE

Amplitude, Velocity Spectrum

- Analyze
- Order tracking
- Filter 0: FIR, LP, 150Hz
- Filter 1: <No Filter>
- Filter 2: <No Filter>
- Windowing: Hanning
- Default frequency window: 2 %
- FFT lines: 32.768
- Required Result: Amplitude (peak)
- Averaging (multiple ffts): Off
- Overlap: 0 %

Envelope Spectrum

- Analyze
- Order tracking
- FIR, BP, 200Hz-800Hz
- FIR, LP, 150Hz
- <No Filter>
- <No Filter>
- <No Filter>
- <No Filter>
- Windowing: Hanning
- Default frequency window: 2 %
- FFT lines: 32.768
- Required Result: Amplitude (peak)
- Averaging (multiple ffts): Off
- Overlap: 0 %

RawData ChartDetails Threshholds

Characteristic Value

**HST1-GMF(SB-LSS) (SBsum)**  
6.102.610.2 (AS)  
Getriebe

change thresholds:  
no change

Trend

Alarm

Warning

Apr-2018 May-2018 Jun-2018 Jul-2018

Trend

Alarm

Warning

21-Apr 28-Apr 5-May 12-May 19-May 26-May 2-Jun 9-Jun 16-Jun 23-Jun 30-Jun 7-Jul 14-Jul 21-Jul 28-Jul

6.102.610.2 HST1-GMF(SB-LSS)(SBsum)

New Threshold

Alarm 0.05

Warning 0.03

Suggestion

Alarm 0.0410189

Warning 0.0319346

Current

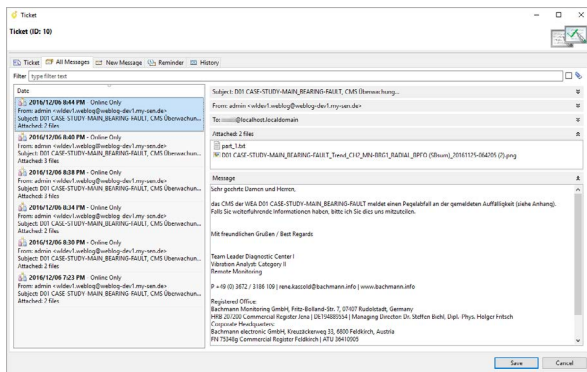
Alarm 0.05

Warning 0.03

Old

Alarm 0.05

Warning 0.03



## WebLog Interface

If you have CMS data from other providers, we can implement a WebLog Interface to bring that data into the WebLog platform, including post processing to generate diagnostic CVs, analogous to those generated on Bachmann systems. With all the monitoring performed through WebLog Expert® the whole process becomes more streamlined than is possible when using multiple software packages

WebLog Expert® therefore delivers all the capabilities expected of a modern condition monitoring system and more. With a highly integrated display layout the system is designed to support our monitoring processes, and can also help you to optimise your own.

## Training

For a package is comprehensive as Weblog, it is inevitable that some training will be required. We have a range of packages available, from beginners training, where WebLog Expert® is used to present case studies of typical real failure modes, through to advanced configuration training, where users can learn how to best configure the systems, thresholds and alarms to meet their requirements for monitoring.

## Technical Requirements

To run WebLog Expert® client software the following are required:

- Operating system Windows 7 (32 or 64 bit) or later
- Microsoft Office 2010™ (32 bit) or later
- WebLog Expert® uses https (Port 443, TCP) for communication with a server, alternatively for servers in its own LAN http (Port 80, TCP). The local firewall must allow this connection.

## Hardware:

- Main memory: ≥ 4 GB, recommended 8 GB
- Monitor: at least 1600x900, recommended 1920x1080, for analysis 2 monitors
- Free hard disk memory: ≥ 10 GB

## Server:

- Connection to a WebLog Server MySQL database instance (eg via the Bachmann remote connection)