ExpertALERT

Delta-3N Ltd.

Automated Diagnostic Software

ExpertALERT™ provides critical machinery health information in addition to vibration data, by rapidly screening vibration measurements and applying over 6000 unique rules to identify over 1200 individual faults in a wide variety of machine types. Our proven automated machinery condition assessment system can process hundreds of vibration measurements in just a few minutes leaving you with a fault diagnosis, fault severity and repair priority and action. Instead of overwhelming you with data that is difficult to interpret, ExpertALERT provides fast and accurate screening that will lead to better diagnostic results.

Key Features
- Automated analysis with 6000 unique rules and 1200 fault types
- English or Hungarian language softwre and reports
- Single Axis, Triaxial, Double-Triax, Demodulation Spectrums
- 3D Waterfall diagrams
- Automated Peak Locator
- Automated bearing fault detection
- Automated Order identification
- Fault frequency calculation mechanism
- Sideband markers
- Cepstrum analysis
- Demod Spectrum analysis
- Impact Demod
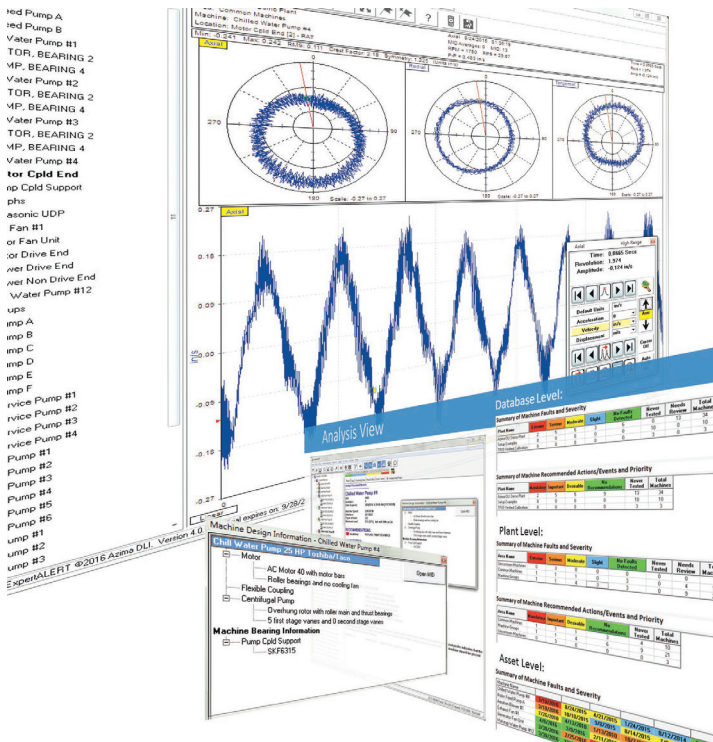- Crest Factor Analysis

- Orbits, filtered orbits
- Bearing database (with more than 75 000 bearings)
- Motor database (with more than 15 000 motors)
- Phase diagramm
- Bode plots
- Nyquist plots
- Automated normalisation
- Process parameters (temperature, preassure, speed, etc.)
- Zoom
- Etc.

More than 50 years experiment in one System
Imagine that dozen engineers with 50 years experiment care for your machines health, and report continously about their condition. ExpertALERTTM give this with high reliability. It's rulebase and foult database is developet continously seence 1972. It can give text reports for all of the machines in the plan with a single click in 2 seconds and the accuraccy is incredible.

Reliability and Accuracy above all
- 99% reliabilty in excluding foults,
- 96% accuracy to diagnose what is the fault,
- 89% accuraccy to determin the fault severity

Azima's sophisticated rulebase methodology extends beyond simple monitoring of alarms on peaks or spectral bands. Our test-point variation feature captures and compares complex patterns detected from the entire set of locations on your machine. By adding this machine- specific baseline data to the database, ALERTTM becomes a highly accurate, automated diagnostic system.

One analyst sotfware to all machines
Instead of overwhelming you with data that is di cult to interpret, ExpertALERT provides fast and accurate screening that will lead to better diagnostic results. TRIO X-series data collectors include embedded ExpertALERT software. The desctop version is also available to recieve data from portable devices (TRIO series) and online system as well. You don't need to buy another analyst software to offline and online system.

Automated Diagnostic Software

It is automated, but you have the chance to do manual analysis:

- Amplitude Alarm Triggering
- Impact Demod Spectra and Waveform
- Overall Values
- Spectrum
- Waveform
- Automated Peak Locator
- Harmonics
- Order Normalization
- Sidebands
- Average Baseline Comparison
- Synthesized Average
- Average plus sigma
- Bode Plot
- Bump Test
- Equipment ON
- Equipment OFF
- Customized Real-time Setup Graphical Remote Control Window
- Hotkeys & Hotspots
- Integration & Differentiation
- Long-time Data Capture
- Markers
- Reference Cursor Delta
- Harmonics
- Sidebands
- Fault Frequencies
- Nyquist Plot
- Order Tracking
- Peak Analysis and Identification Functions
- Phase Analysis
- Cross Channel
- Polar Phase Plot
- Run-up / Coast-down plotting
- Spectral Waterfall
- Bode-Peak & Phase
- Peak Hold
- Spectrum
- Single Axis
- Triaxial
- Double-Triax
- Demodulation
- Waterfall
- Native, Integrate, Double- integrated, Decibel
- Time Synchronous Averaging
- Waveform
- Autocorrelation
- Single Axis
- Triaxial
- Double-Triaxial
- Orbit, Filtered Orbit
- Poincare Map
- Single Circular Graph
- Triaxial Circular Graph
- Waterfall with Correlation Factor
- Native, Integrated, Double- integrated