

# Vibration HUB

# VIBRATION HUB



- **Early fault detection helps prevent sudden downtime, ensuring productivity and product quality.**
- **Accurate fault diagnosis pinpoints, allowing component replacement before failure occurs, extending equipment lifespan, and minimizing operational costs.**
- **Ensure a safe working environment for employees, reducing workplace accidents**
- **Reduce the solid waste, promotes a circular economy, and protects the living environment.**

01

Early diagnosis of equipment condition

- Early warning of equipment operating status corresponding to levels: good operation, limited operation, impending failure.
- Vibration spectrum analysis to diagnose the cause of the problem. Provides various types of spectra such as acceleration, velocity, envelope spectra suitable for many different types of equipment.
- Common types of damage that can be diagnosed
  - **Gearbox:** Chipped teeth, broken teeth, tooth fatigue, bent shaft
  - **Bearings:** Damaged inner and outer rings
  - **Rotor:** Dynamic imbalance, coupling misalignment, shaft bending, structural looseness
  - **Pump:** Cavitation
  - **Electric motor:** Rotor bar breakage, magnetic field eccentricity

02

Resonance analysis

- Determine at what speed the machine vibrates the most, determine the natural frequency of the system, and develop a solution to prevent resonance.

03

Dynamic balancing

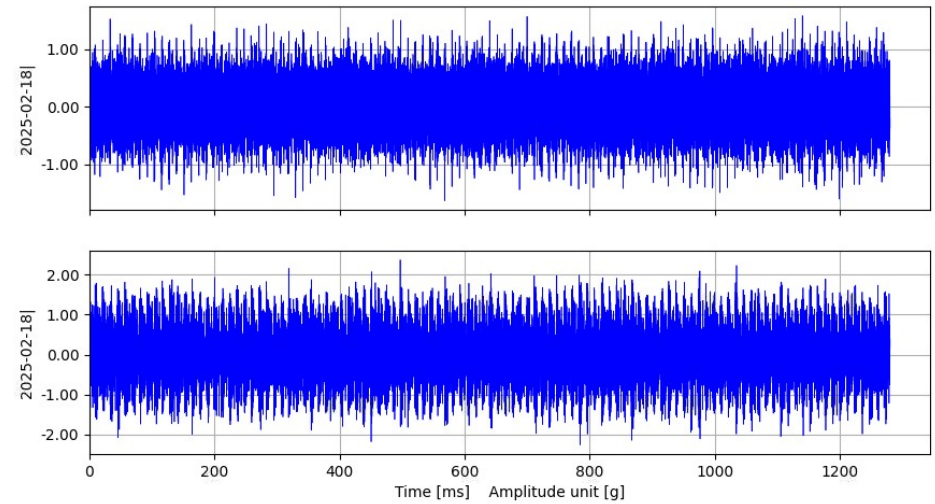
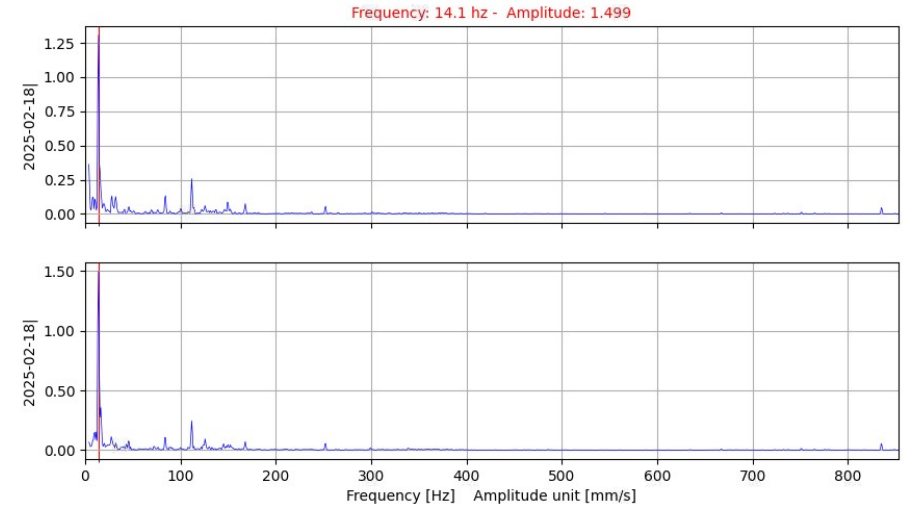
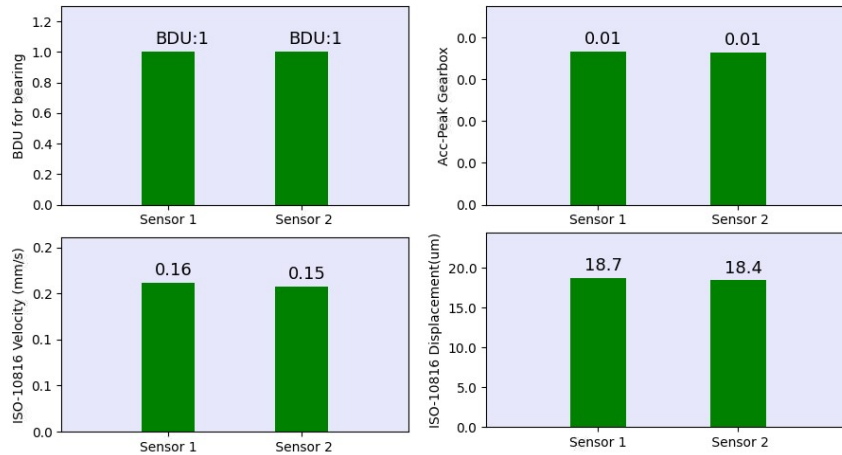
- Identify the imbalance and determine where to add counterweights to return the equipment vibration to normal.

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Specification	Vibration Expert
Bandwidth	2 Hz - 20 kHz
Sampling rate	2.5 kHz -40kHz (Synchronize 3 channels)
Dynamic range	103 dB
SNR	98 dB
Channel	4 channels (3 vibration/1 laser)
Sensor type	Accelerometer, Displacement Probe
Connectivity	Wifi/ USB
Language	English Vietnamese

## Vibration Diagnostic

- Waveform Analysis
- Frequency Analysis
- General Indicator

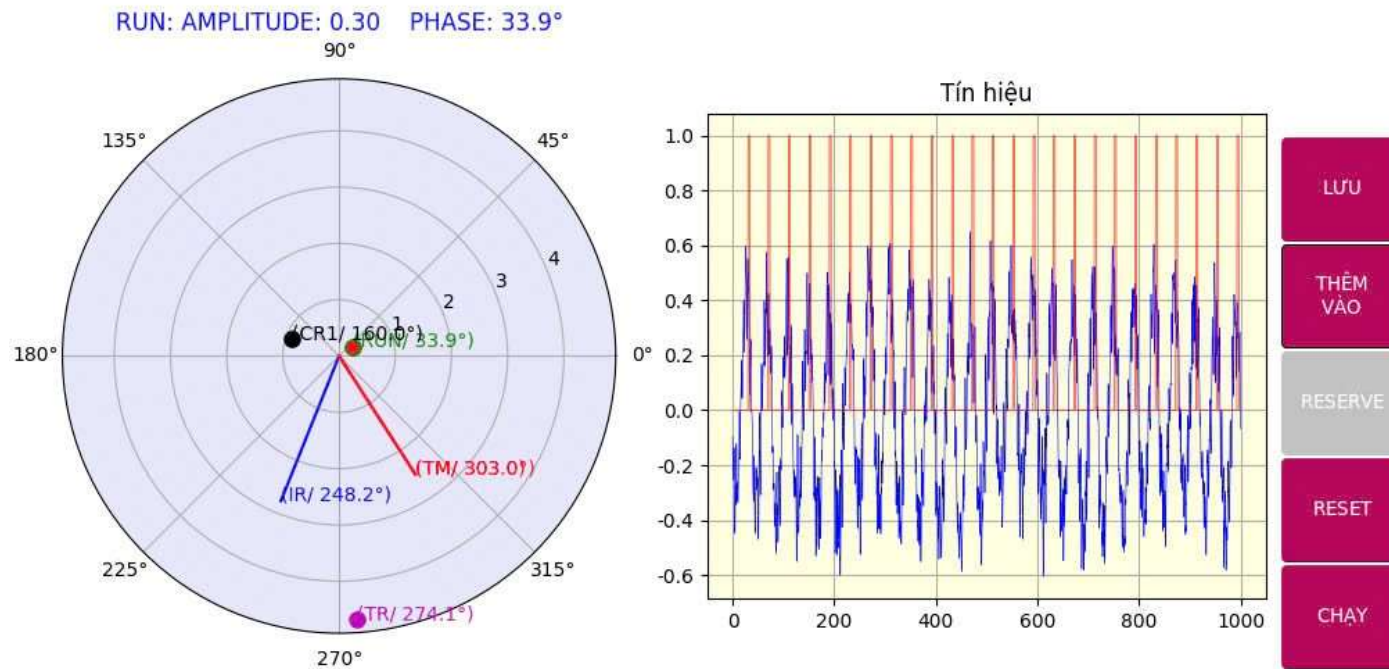


## Dynamic Balancing

- One plane balancing
- Two plane balancing
- Oneshot balancing

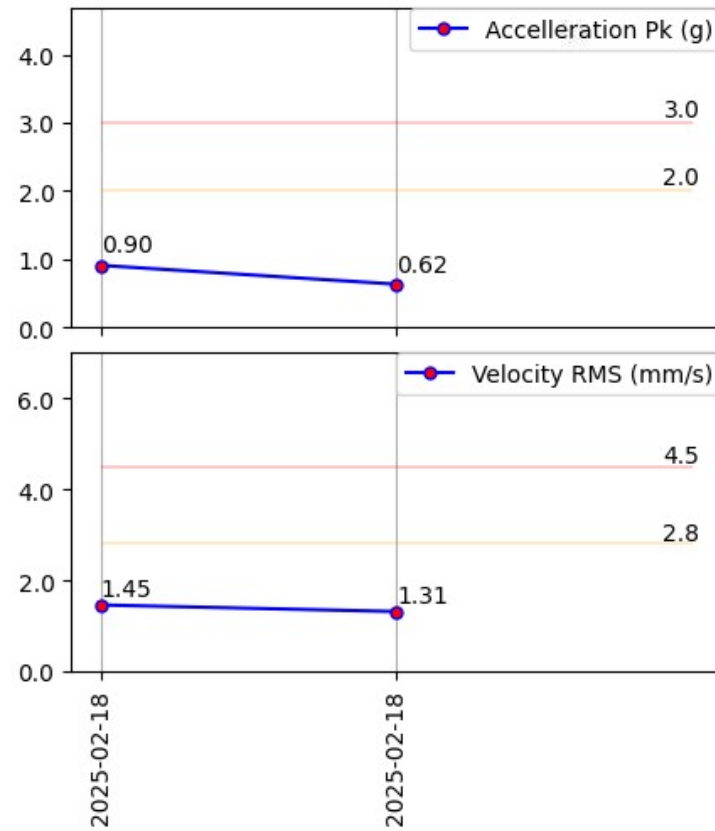
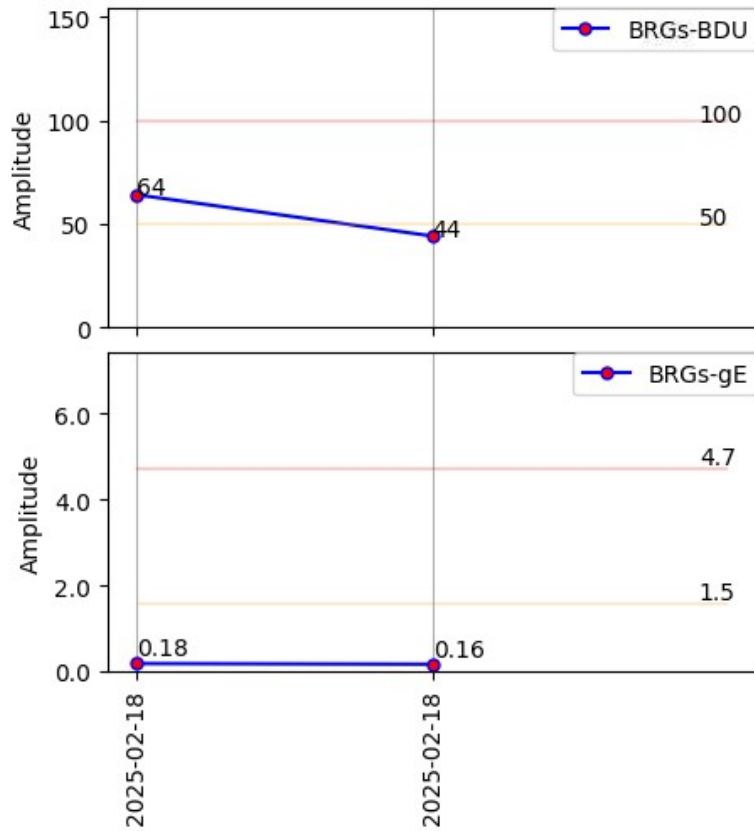
## Feature

- Independant step
- Long time storage
- Waveform and laser display
- Polar display



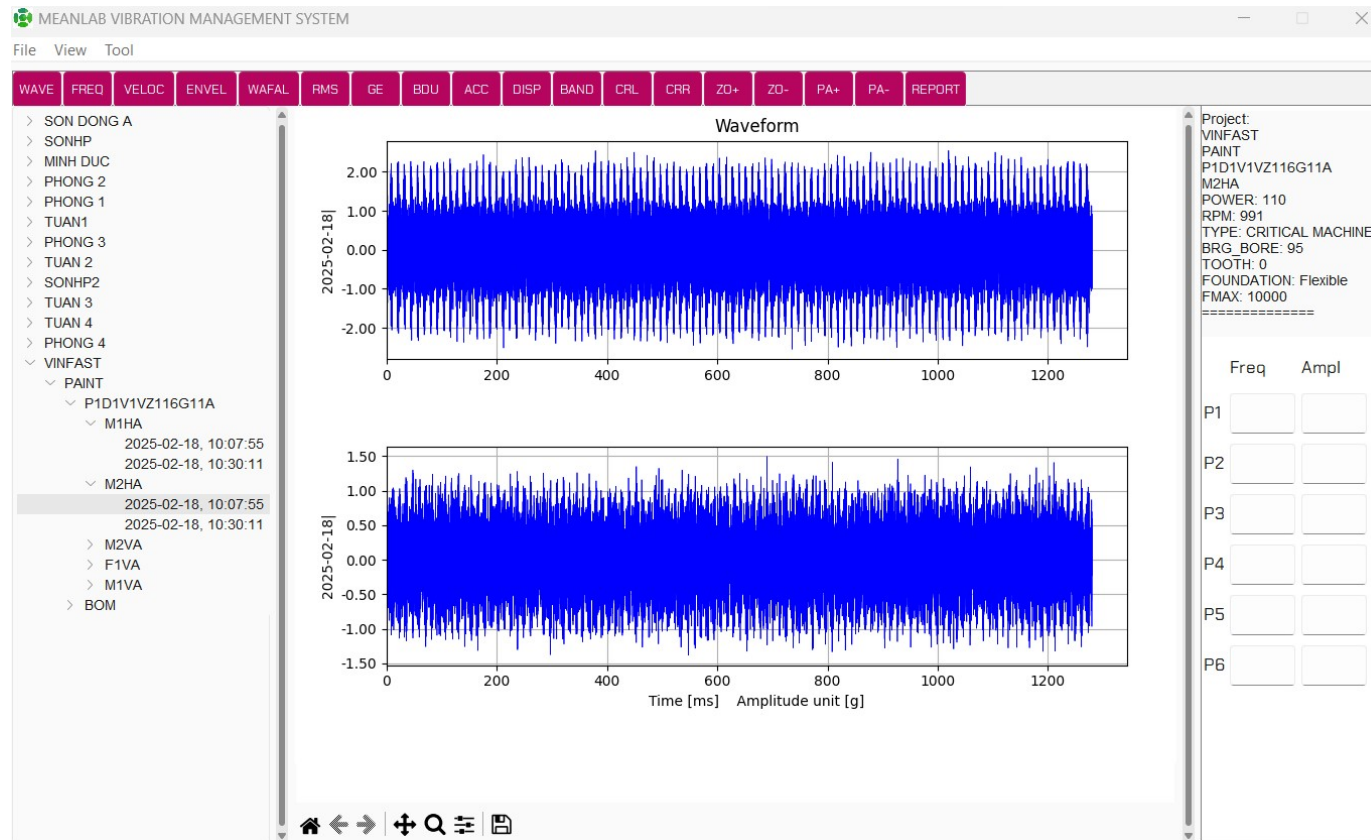
## History Analysis

- Show waveform, spectrum, trend, waterfall
- Bearing fault frequency of 20000 bearings
- Automatic report, CSV export



## Vibration management software on PC

- Easy import .csv file
- Show waveform, spectrum, trend
- Automatic report





# VIBRATION HUB

- **12-month warranty, 12-month remote diagnostic support**
- **5 days free training course**
- **Flexible installment policy**
- **Simple interface in Vietnamese and English**
- **High accuracy**
- **Compatible with many types of velocity, acceleration, displacement sensors.**



# VIBRATION HUB



- **Lithium Ion battery pack for 6 hours of continuous operation, rechargeable.**
- **Dimensions: 232 x 178 x 43mm. Compact design, high durability.**