

VibVue®

Rapid Vibration Analysis Using
High-Speed Video and Motion Magnification



Diagnose vibration and dynamic
problems that cost you time and money



**Mechanical
Solutions, Inc.**

Test ■ Analyze ■ Solve ■ Design ■ Products

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About VibVue®

VibVue® is a powerful high-speed video tool to help engineers and technicians identify and solve critical vibration issues.



Advanced Technology

VibVue® implements Motion Magnification technology licensed from a major university in a combined software and hardware solution.



Fast and Easy

VibVue® is fast, easy to implement, and less likely to miss critical issues, so problems can be diagnosed more quickly, and with more certainty.



Proven Record

MSI's 25-year track record for solving difficult rotating machine vibration and dynamics problems is part of the video review Support Package.



Support Expertise

Receive training, software support, video review, consulting, or optional hands-on troubleshooting for help identifying and solving vibration issues.

VibVue® Enables Reliability and Maintenance Engineers to:



Pinpoint Problems & Root Causes



Reduce Vibration Problem Resolution Time



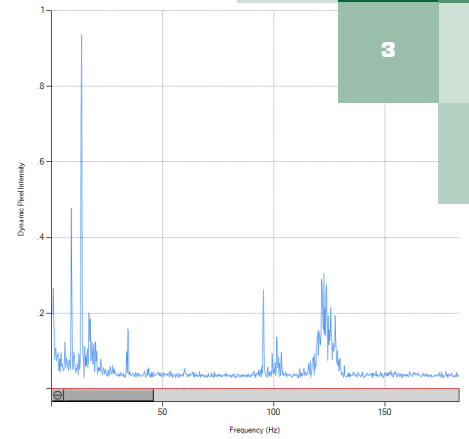
Lower Maintenance Costs with Magnified Video



Reduce Machine or Plant Downtime

How VibVue® Works

VibVue® combines Motion Magnification technology with high-speed video capability and streamlined, intuitive software to help engineers precisely and easily acquire, visualize and analyze the data needed to quickly pinpoint root causes of vibration problems. Using VibVue® will result in reduced problem resolution time, lower maintenance costs, and decreased machine or plant downtime.



High-Speed Video

Comprehensive pixels-are-sensors data allows you to easily see, measure, analyze and understand vibration for entire systems.

Vibration Analysis

Find the problem root cause quickly and intuitively, avoiding a costly chronic trial and error approach.

Motion Magnification

Implements high resolution Motion Magnification technology licensed from a major university.

Problem Diagnosis

Sophisticated analysis results to measure problems, validate computer models, and effectively communicate to decision-makers.

VibVue® detects and displays vibration well under the ISO 10816 acceptance limits for comprehensive understanding even with high velocity, but low displacement.

“ The VibVue system is the best tool we have to get funds approved to fix the right thing at the right time. With VibVue, management gets a clear, precise, visual understanding of vibration issues in a system. ”

- GARY ADAMS, RELIABILITY SOLUTIONS GROUP, JOHN H CARTER

VibVue® Key Features:

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VibVue® Standard Software Package

- Two (2) Licenses VibVue® Software
- Rapid Video Processing
- Frequency Domain Analysis
- FFT Displacement Display
- Color Enhanced Data Image Maps
- Motion Magnification Up to 1000x
- Digital Image Stabilization
- Two (2) Days Hands-on Training, Including Videography, Software Usage and Vibration Basics by Troubleshooting Professionals for One (1) Trainee at MSI or Certified Trainer Facility

VibVue® Pro Software Package Also Includes:

- Relative Phase Map
- ISO Chart Background
- Automated Reporting
- Up to Four (4) Trainees at MSI or Certified Trainer Facility

Accessories

- Two (2) Hard Side Travel Cases
- Removable Backpack for Transporting
- Pistol Grip Professional Tripod with Quick Connect Camera Adapter Plate
- Four (4) 5MP Lenses: 6mm, 12.5mm, 25mm, 50mm
- Vibration Dampening Pads
- Distance Meter
- Necessary Cables



Computer

- High Performance Laptop
- Windows 10 Pro
- 32 GB RAM, 512 GB SSD
- 3-cell 56 Wh Battery
- Tripod Stand and Sun Hood

Support & Maintenance (First Year Included)

- Updates to VibVue® Software
- Software Support (Business Hours)
- Expert Review of VibVue® Data by Industry-leading Vibration Troubleshooting Engineers

Standard Lighting Kit:

- Two (2) LED Lights, 16,000 lux at 1m, 1,700 lux at 3m
- Two (2) Tripod Stands



Optional Upgrades: Traveler Lights

- Two (2) Compact, Lightweight LED lights, 22,000 lux at 1m, 2,200 lux at 3m

Training

- Additional Trainees
- Customer-site Training

High-Speed, High Resolution Cameras

	VibVue®	VibVue® High-Frequency
Minimum Displacement & Motion Magnification	0.1 mils p-p	0.2 mils p-p
Detection Threshold at 3m FOV, 10 Second Recording	<15% error	<20% error
Default Upper Frequency at Resolution	156 Hz @ 1920x600	640 Hz @ 1280x720
Maximum Frequency at Resolution	429 Hz @ 1920x200	26112 Hz @ 1280x8
Maximum Resolution at Frequency	1920x1200 @ 78 Hz	1280x1024 @ 454 Hz



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