



MOTION AMPLIFICATION[®] SERVICES



SEEING IS
BELIEVING

RDI TECHNOLOGIES, INC. SERVICES

Our RDI Technologies Services Department harnesses the power of Motion Amplification® for a wide range of applications in research, product, and quality assurance testing, as well as in the predictive maintenance sector. Motion Amplification® is the first non-contact, camera-based technology that allows users to see — in real time — motion that is invisible to the human eye or can be difficult to measure with traditional sensors.

Our Motion Amplification® Certified Service Engineers use this technology to see and measure motion, which in turn helps them make decisions about critical applications and systems based on real data. They are able to quickly measure, visualize, and communicate vibrations with technical and non-technical users.

Whether troubleshooting, screening, commissioning, or mentoring, the RDI Services Department is committed to providing the expertise and resources needed to help you define, execute, and support a world-class reliability program. The following is a list of services tailored to fit your organization's specific needs:

Proof of Concept (POC) Visit

Our service engineer visits your site and demonstrates the RDI Technologies Motion Amplification® (MA) and Motion Analysis systems and software. This is followed by a walkthrough Proof of Concept process that explains how Motion Amplification® can be used on your assets while also allowing you to evaluate our system and software and how it can be used in your facility. Our service engineer reviews the data collected, prepares videos to illustrate that data clearly, and presents those videos to your team. The videos may provide some insight into the condition of the assets examined.

DELIVERABLES

On-site meeting at the end of the service visit to review data collected.

Videos (.mp4) of the Motion Amplification® data collected.

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**SUPPORT LIKE THIS IS GREATLY
APPRECIATED IN TODAY'S
WORLD.** //

— JASON GOEDKEN
PdM Technician

Motion Amplification® Data Acquisition & Analysis

Our service engineer visits your site, acquires recordings of the assets using our proprietary products, and analyzes those recordings. Videos and a summary report are prepared, including data that supports the observations made. A one-hour video call is scheduled to review the videos and information in the report. We provide support customized specifically for you and the needs of your facility, such as:

PERIODIC INSPECTIONS

This service provides regularly scheduled visits to acquire recordings and analyze data on your assets. It helps monitor and track the condition of your assets.

COMMISSION/ACCEPTANCE/ BASELINE TESTING

This data acquisition and analysis is performed on new installations, machinery rebuilds, asset modifications, alignments, process or load changes, and repairs and helps you determine if your asset condition is acceptable or needs attention. If applicable, our service engineer conducts a long-term acquisition to see and measure thermal growth. The Motion Amplification® videos help you communicate faults and problem areas to other plant personnel and contractors, and the data collected is archived as a baseline for future reference and comparison.

TROUBLESHOOTING

This service helps you better understand the nature, cause, extent, and severity of asset problems such as bad actors, quality issues, or reported vibration problems. The Motion Amplification® videos help communicate the faults and problem areas to other plant personnel.

PRE-OUTAGE INSPECTIONS

This service helps you prioritize and plan your plant outages by utilizing Motion Amplification® to take a comprehensive look at your assets. With these inspections, you will better understand asset conditions and the extent of repairs required while enhancing communication, which is essential for planning a successful shutdown.

ASSET WARRANTY INSPECTION

This service helps correct or repair asset problems while they are still under warranty, saving you on expensive repair costs. The Motion Amplification® videos help you communicate faults and problem areas to other plant personnel and the OEM/warranty company.

FOLLOW-UP VISIT

Our service engineer uses this visit to determine if the asset repairs were done successfully or if any new issues were introduced. The Motion Amplification® videos help you communicate the faults and problem areas to other plant personnel and contractors. The data is archived for future reference and comparison.

DELIVERABLES

Videos (.mp4) of the Motion Amplification® data collected on each asset.

Data plots from the Motion Analysis system.

Observations and recommendations based on the data collected.

PDF summary report of all data collected.

A one-hour video call with you to review the videos and report.

Warehousing and archiving of data for future reference.

Motion Amplification® Mentoring

Our service engineer provides a Motion Amplification® program assessment to review the current state, best practices, and new areas of implementation to improve outcomes. Below, are some examples of Mentoring activities that are conducted based on your facility needs:

MOTION AMPLIFICATION® PROGRAM ASSESSMENT

Our service engineer reviews the use of our systems and software in conjunction with your personnel to assess proper utilization including frequency of use, asset prioritization, and asset coverage. RDI reviews Motion Explorer™ to confirm that an efficient and logical data organization exists and assists in building or rebuilding an asset hierarchy. Our service engineer reviews your Motion Amplification® recordings and videos to determine the proper recording acquisition settings, image quality, and use of Motion Amplification® software features and tools.

CONTINUOUS TRAINING

Our service engineer reviews current software usage and provides training and support of more advanced features not being utilized in Motion Amplification®. This service ensures your onsite analyst stays up-to-date on all of the newest functionality and capabilities Motion Amplification® has to offer.

SUPPORT

Our service engineer joins you in the field side by side to acquire data on assets of concern. This is followed by a joint review of the data to identify problems, inefficiencies, or necessary repairs.

DOCUMENTATION

Our service engineer works with you to document the Motion Amplification® “wins,” showing real value for your team and helping build a return on investment case for your reliability program.

DELIVERABLES

On-site meeting at the end of the service visit to review key findings.

Summary report of mentoring activities and recommendations to optimize the Motion Amplification® Program for future success.

Return on Investment report.



Motion Amplification® Kickoff

This service follows our RDI Certification Training, connecting the dots between your training and actual system use and ensuring your Motion Amplification® program is rolled out successfully. Our service engineer helps build your Motion Explorer™ hierarchy and assists you in acquiring Motion Amplification® field data, analyzing the collected data, and preparing videos that illustrate the findings during this process. Our service engineer works closely with you and your team to survey your facility and identify applications for Motion Amplification® technology and all locations for deployment. This helps you understand when and how Motion Amplification® is deployed to support and complement your other condition monitoring activities (Vibration Analysis, Ultrasound, and Infrared).

DELIVERABLES

Assistance in building the Motion Explorer hierarchy.

Assistance with field data acquisition and analysis.

Motion Amplification® deployment plan.



Comprehensive Facility Review

Our service engineer conducts a comprehensive facility review and recommends a Motion Amplification® deployment plan based on your industry, facility, and staff resource availability. Our service engineer walks the plant with you and your team, assists in inventorying assets, conducts interviews with maintenance and operator personnel, and reviews asset criticality in the context of Motion Amplification®. After a thorough review process, our service engineer creates a plan based on best practices used in world-class facilities in similar industries to maximize your utilization of Motion Amplification®. The plan includes optimal system configuration to acquire accurate data, frequency of monitoring, and asset coverage tactics based on maximizing your personnel.

DELIVERABLES

A written plan for implementing the Motion Amplification® technology that includes the systems, software, training, and support required to successfully deploy a program. The plan also provides a comprehensive review of the assets to be included in the program and the recommended frequency of monitoring those assets to optimize facility performance.

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Thank you RDI Technologies Inc. I appreciate how you took the time to personally answer my questions and help me get the most out of Motion Amplification®. The level of service and customer care we've experienced with all of our contacts at RDI is consistently second to none."

—DENNIS WILLIAMS

Reliability Engineer



Remote Motion Amplification® Analysis

This service requires you to upload the data recordings to a remote server where our service engineer accesses them for analysis. If necessary, our service engineer works with you to determine if more or different data and information must be acquired. Once the data has been analyzed, videos and a detailed summary report are created. Our service engineer schedules a 1-hour video call with you to do an in-depth review. This helps you identify the nature, cause, extent, and severity of reported asset issues. It provides a better understanding of the proper acquisition techniques, settings, and data analysis utilizing the Motion Amplification® software features. The videos collected help you communicate the faults and problem areas to your team, and the data is archived for future reference and comparison.

DELIVERABLES

Videos (.mp4) of the Motion Amplification® data collected on each asset.

Data plots from the Motion Amplification® system.

Observations and recommendations based on the data collected.

PDF summary report of all data collected.

A one-hour video call with you to review the videos and report.

Warehousing and archiving data for future reference.





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