

Motion Amplification



Powered by Motion Amplification

THE WORLD'S FIRST NON-CONTACT MOTION AMPLIFICATION PLATFORM

Iris M from RDI Technologies is the first device of its kind that allows users to see - in real time - motion that is unseen to the human eye. This patented Motion Amplification technique lets you see the invisible.

The **Iris M** platform from RDI Technologies monitors critical manufacturing operations, processes, quality and structural components that affect plant reliability and productivity. **Iris M** is a unique, revolutionary technology that detects subtle motion and amplifies that motion to a level visible with the naked eye. By turning every pixel in the camera into a sensor, **Iris M** takes millions of measurements in a fraction of a second. And it does this with no physical connection to your machinery or equipment.





The Iris M technology platform delivers real-time video to users, enabling them to make instant decisions about manufacturing operations based on real data. The ability to visualize the entire process while retaining component-level analysis makes Iris M the perfect tool for screening, fault finding, baseline or commissioning and pre/post repairs or retrofits. Every step of the way, Iris M provides specific information about the process or issues at the root of a quality problem.

Iris M's Motion Amplification software produces an easy to understand amplified video of motion across your equipment or machinery which enables far more effective communication between technical and nontechnical personnel

 which enhances decisionmaking. Videos from the Iris M platform are produced within seconds of data collection. In other words, Iris M saves you time and money.



Unique features and benefits motion technologies and services offer are;

- Measure deflection, displacement, movement and vibration
- Reveal movement not visible to the human eye
- Every pixel in the video becomes a sensor
- See the bigger picture
- Non-contact measurement
- Visualisation of vibration data
- Complementary CM tool
- Revolutionises ODS analysis
- Set up, acquire and visualise in minutes not days
- Applications: Up to your imagination!

Why is Visualization So Important?

Imagine what you could do by visualizing faults in machinery, infrastructure, and human performance. You can look at numbers and analysis from tools like accelerometers, strain gauges and modelling software and still not be able to visualize what the problem is. Being able to see what is happening can change your perspective completely along with allowing more targeted and cost effective approach to fault analysis. There are tools to magnify an image or to offer point measurements on a machine or piece of infrastructure, but no real way to see what is happening live and over the whole asset until now. RDI offers the first non-invasive, simple, and cost effective way to visualize what is happening beyond what you can see with your eye.

We aren't guessing at the motion or adding in artifacts, you are seeing the true microscopic motions of any object in the field of view.

How Does It Work?

RDI's patented technology measures deflection, displacement, movement and vibration not visible to the human eye. RDI utilizes video camera technology in conjunction with proprietary software and processing algorithms to extract meaningful data. This technology turns every pixel in the camera's view into a sensor capable of measuring vibration or motion with high levels of accuracy.

You can visualize the motion together with measuring and quantifying any structural assets that a camera can see. Motion Amplification is a proprietary video processing algorithm that detects subtle motion then amplifies that motion to a level visible with the naked eye which enhances the understanding of the components and interrelationships creating the motion.