



**ZOOM**<sup>MC/™</sup>



**VIBROSYSTEM**<sup>MDR</sup>

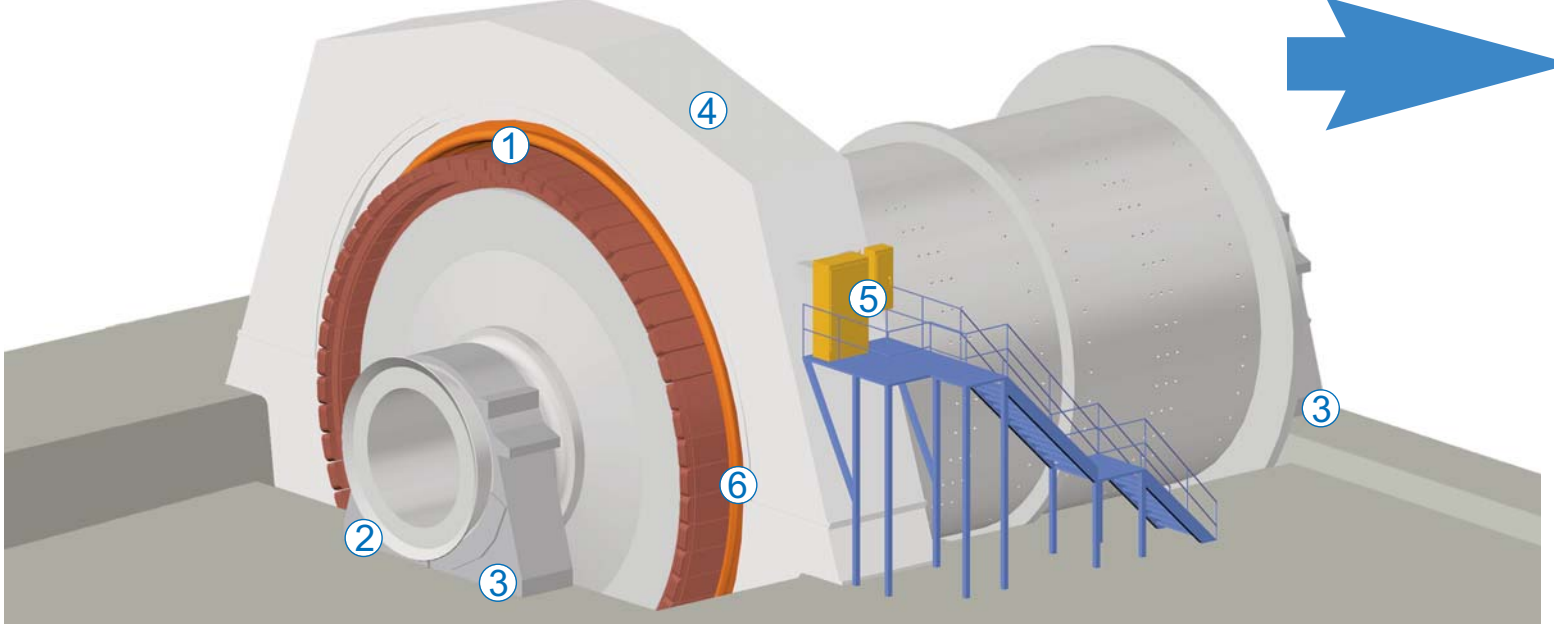
INFORMATION TO BETTER MANAGE YOUR MACHINES

# COMPLETE MONITORING SOLUTIONS FOR THE MINING INDUSTRY



# VibroSystM's complete monitoring solution for the mining industry

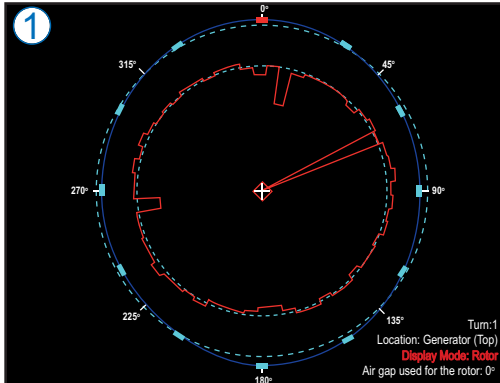
VibroSystM values all its clients and prides itself in being able to provide **complete monitoring solutions**. We don't just sell products. We give your machine a thorough mechanical and electrical check-up. Our experienced professionals **identify problems**, propose **solutions** and get you **results**.



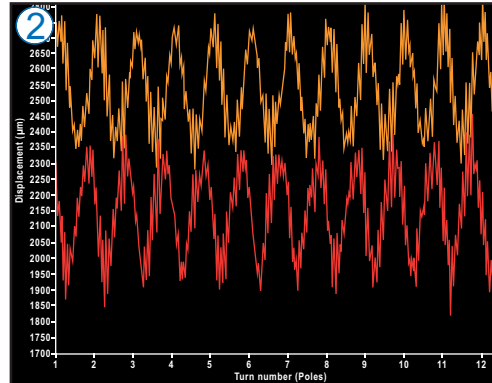
Zero Outage Online Monitoring  
**ZOOM**™

## Software Suite – Just plain simple.

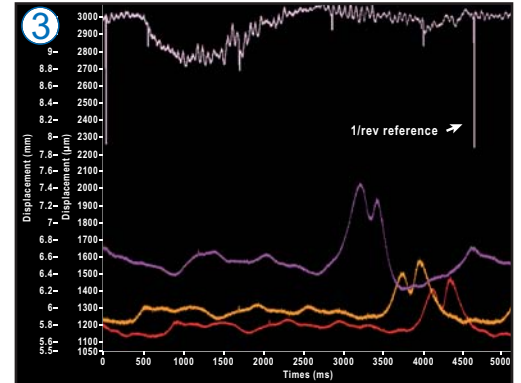
Integrates and correlates all parameters in the same software.



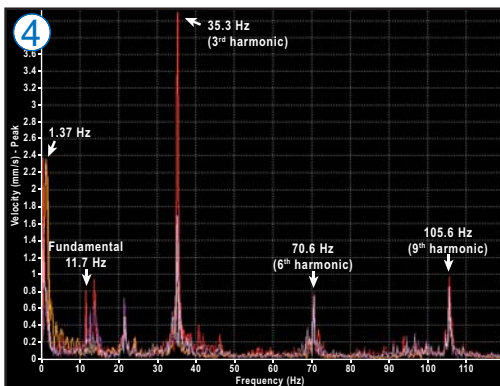
Polar view of rotor shape and position inside stator shape



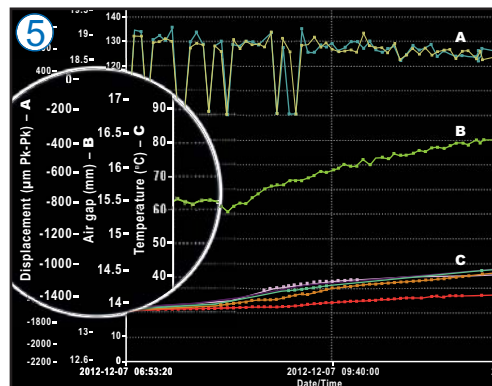
XY graph showing axial thrust displacement



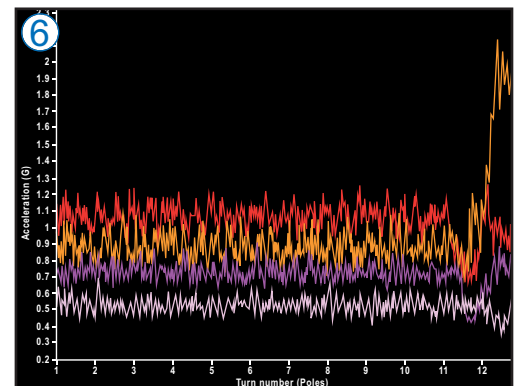
Monitoring of oil film clearance of radial bearing pads



Spectrum graph of stator core vibration at 12 rpm nominal rotational speed

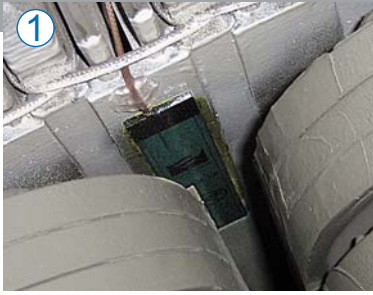


Trend graph of knife switch temperature, air gap and axial displacement upon return to service



End-winding vibration behavior on a Ball Mill while increasing power





1 VM sensor for air gap Monitoring



2 PES probe for axial thrust displacement



3 OFC probe for oil film clearance monitoring

One rack.  
One supplier.  
All parameters.



4 VSM797S - Piezoelectric accelerometer for stator core vibration monitoring



5 FOT - Fiber optic temperature sensor for knife switch temperature monitoring



6 FOA - Fiber optic accelerometer for end-winding vibration monitoring



### RESULTS Interpretation Report

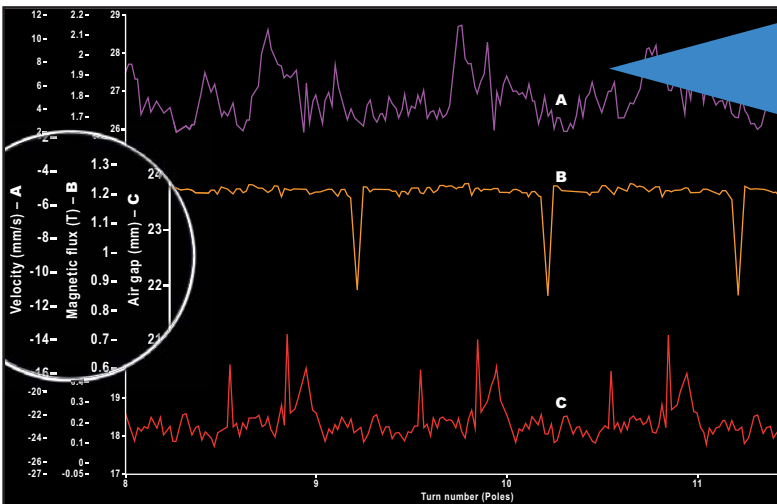
Our technical specialist's trained eye is able to correlate all the data that has been collected in order to identify patterns and anomalies or simply give your machine a clean bill of health.



Add to a VibroSystem standard rack by customizing it specifically for your requirements.

Combine all your data acquisition units in one compact space, and simultaneously monitor all the critical parameters on your machine.

This vital data can then be analyzed and correlated in order to maximize the usage of your machine, ultimately saving you time and money.



Correlation between stator core vibration with rotor shape and two defective rotor poles on a Ball Mill. The vibration appears to be associated with a bump on the rotor

# VibroSystM Services

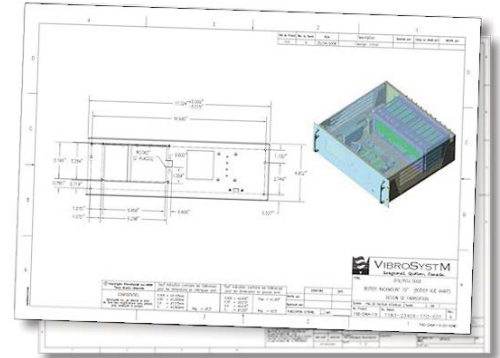


Our highly qualified technicians travel all over the world to perform thorough inspections of the location where the equipment is to be installed. They ensure that all systems and components are designed, installed, tested, operated and maintained in accordance with the clients' needs and operational requirements.

When starting up a new project or when upgrading an existing one, the most important step is to assess the requirements, from start to finish.



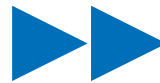
Monthly status reports keep you apprised of every step that is taken to guarantee the successful outcome of your project.



That is why our Project Management Division takes charge of your project from A to Z. Our professionals plan every detail, from the equipment that is needed to the interpretation of the results that are obtained.

Extensive experience in the field and commitment to our clients have always been the main source of motivation for our team of engineers. Our Research & Development Department continually pursues ground-breaking ideas that best fit our clients' requirements.

VibroSystM offers you the most comprehensive training courses, which will allow you to take full advantage of your monitoring systems.



## Data Interpretation Course



Our **Phase 1** training course, will demonstrate how your machine works and how the newly installed equipment can accurately analyze and diagnose any possible problem.

Our Advanced **Phase 2** training course, presented by our Results Interpretation Specialist, will give you the skills necessary to analyze the results that your new system has compiled.

Upon the successful conclusion of this course, and alongside your certificate of completion, you will be able to maximize the usage of your ZOOM® System.

[www.vibrosystem.com](http://www.vibrosystem.com)