

Condition monitoring system

Condition monitoring of machines provides knowledge about the condition of machines. Any deterioration in machine condition can be detected and preventive measures taken at an appropriate time to avoid catastrophic failures. This is achieved by monitoring such parameters as vibration, wear debris in oil, acoustic emission etc.



Application field:

thermal power industry
mining industry
cement industry
maritime industry
steel production facilities
pulp and paper processing
other industries

Why Choose Derzmann?

Derzmann provides complete protection, condition, and performance monitoring solutions for all rotating machinery applications. Products include full range of transducers and associated hardware, as well as condition and performance monitoring solutions. With years of experience, our engineers provide a reliable and high quality systems. machinery.

Flexible solutions

Do you have special requirements for your monitoring solution? Our experts will tailor our flexible systems to meet your needs.

Broad spectrum of application expertise.

Depending on the plant and particular use, identical systems can actually have different monitoring requirements due to, for example, capacity requirements, the condition of the machinery or the quality of the raw materials. We incorporate this industry-specific experience when configuring the monitoring solution to the customer's needs.

Reliability in any environment.

Whether in highly demanding environments in conventional power plants, high-temperature applications in the steel industry or in aggressive environments in other industries – our monitoring solutions will ensure maximum uptime for your machinery.

What capability it have?

Machinery protection

Regulations usually dictate that power plants install protection systems to monitor and measure the events that cause a change in the level—or behavior—of vibration from critical rotating machines. Should a breakdown threaten, our system would initiate a shutdown within a fraction of a second.

Condition monitoring

To cut the cost of unscheduled maintenance, unnecessary inspection and trouble-shooting, system operators must anticipate wear and tear and recognize incipient failure conditions.

Combustion monitoring

Modern gas turbines curb emissions of harmful, ozone-forming greenhouse gases and NOX through advanced combustor designs, a by-product of which involves combustion-driven pressure, heat release and flow rate oscillation which can damage the turbine package, adversely affecting performance. Our unique turnkey system aids active protection, alerting control systems to the signs of instability through variation in pressure amplitude and discrete frequencies observed within designated frequency range bands. Combustion monitoring enables continuous output to control systems enabling engineers to determine the cause of instability or high emissions and undertake remedial action such as adjusting gas and air mixes and combustion sequencing.

Performance monitoring

Performance limitations have a direct effect on operating costs and the production output. Derzmann online thermodynamic performance monitoring and analysis solution provides continuous tracking of equipment condition and enables corrective action when degradation is detected. Sophisticated algorithms enable the users to easily determine machine efficiency and if there has been a loss of efficiency and/or capacity.

