



# The innovative real time mill monitor for the mining industry



**MagoSense**   
Powered by KIMA PROCESS CONTROL

 **MAGOTTEAUX**

# Getting real-time knowledge of what is going on inside your mill

Historically, impact measurements in mills were mostly based on the human ear or relied on the skill and experience of the person who calibrated the measurement system; **methods which tended to be subjective.**

Together with our German partner, KIMA Process Control, we have developed a technological solution that lets you “see” what is happening inside your operating mill. All technical aspects, such as wireless data transmission, power supply and overall system robustness, have already been proven and widely adopted by industry leaders in the cement industry.

Our digital tool, **MagoSense**, is designed specifically for the mining industry, based on an existing, proven and used technology. Primarily developed for use on Semi-Autogenous Grinding (SAG) mills, it can operate on any type of tumbling mills and is adapted to the harsh mining environment.

## Your challenges

SAG mill operation is “sensitive” to changes in ore quality (hardness and size). Changes in the feed can quickly result in a build up, or loss, of rocks inside the mill. Both situations result in undesirable conditions for the mill.

### Are you looking ...

... to optimize your mill's performance and maximize its availability?

... for more stability of your operations?

... to increase your production, reduce your operating costs and increase your revenues?

... to prevent liner damage?

MagoSense will prevent you running blind by gathering information in order to optimize the working conditions of the mill.



## A new generation tool to improve your production and safety

MagoSense uses vibration and shell bending sensors, as well as a digital signal processing technology, to provide information about what is happening at each of the 360° of the mill.

Providing the total volumetric filling and ball impact information, MagoSense allows the operators to closely follow their mill operation and seek for optimal working conditions that directly leads to improved performance.

MagoSense presents **two major assets**:

- All measuring devices are installed directly to the outside of the mill shell. **MagoSense does not suffer from sound interference like other off-mill sensors do.**

## Your advantages



**Maximize mill throughput.** MagoSense helps control the mill fill level to avoid mill overloading and allowing better control of mill grind-outs.



**Minimize liner damage & wear.** MagoSense helps reducing the occurrence of ball impacts on liners, thereby extending liner and media lifetime.



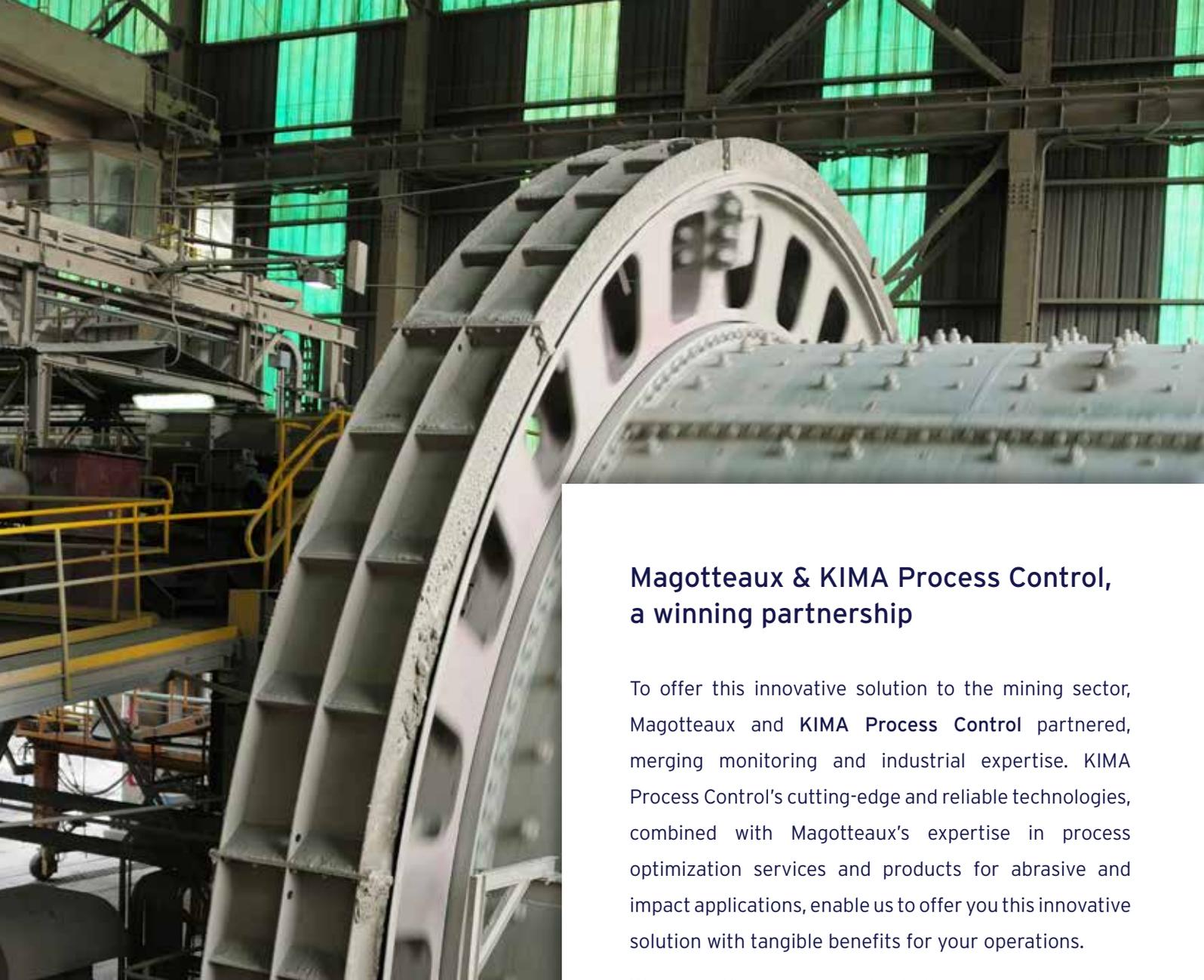
**Improve mill efficiency.** MagoSense helps the mill operator to decide on the grinding strategy in order to maintain the optimal power and load charge conditions for maximization of the grinding efficiency.



**Reduce mill downtime.** MagoSense helps reducing unexpected mill stops due to any type of grinding issue, having a direct positive impact on safety and productivity.

- The energy required to power all the electronics is supplied by a pendulum driven electrical generator. **No batteries are necessary.**

Maintenance stops are not required to change the sensing liner or the batteries, which has a direct positive impact on your production and safety.



## Magotteaux & KIMA Process Control, a winning partnership

To offer this innovative solution to the mining sector, Magotteaux and KIMA Process Control partnered, merging monitoring and industrial expertise. KIMA Process Control's cutting-edge and reliable technologies, combined with Magotteaux's expertise in process optimization services and products for abrasive and impact applications, enable us to offer you this innovative solution with tangible benefits for your operations.

We know it's an increasingly challenging world and any difference we can make to reduce the overall running cost of your operation will have a positive impact on your bottom line.

We are much more than just suppliers! As true innovators, we invest continuously in R&D and develop strong and close relationships to understand your challenges and define the best possible solution prior to engineering and delivering the promised quality. We use innovative and modern monitoring tools to prove our promise and optimize your operations.

**Our solution is scalable and can be tailored based on your specific needs.**

Reach out to us! Our experts will be happy to discuss to find the right solution for your plant.



Process optimization services and products for abrasive and impact applications.

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