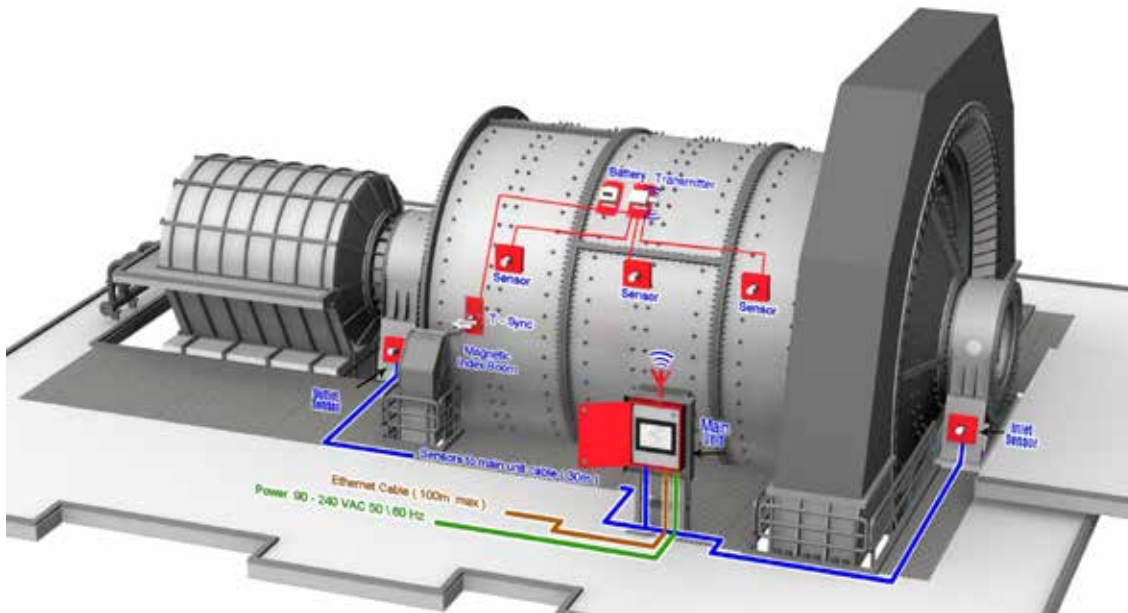


PROCESS IQ

TriSlicer

Looking Inside Your Mill
Comprehensive 360° Mill Vibration Analysis



TriSlicer utilises vibration sensor technology and digital signal processing to output a charge toe position, shell, inlet and outlet fill level vectors and a measure of charge impact intensity (liner damage level).

Overview

TriSlicer is an upgrade of the hugely successful MillSlicer instrument, with **two additional shell mounted vibration sensors**, providing three cross sections along the length of the mill, with a corresponding toe angle, liner damage level and fill level vector for each of the cross sections.

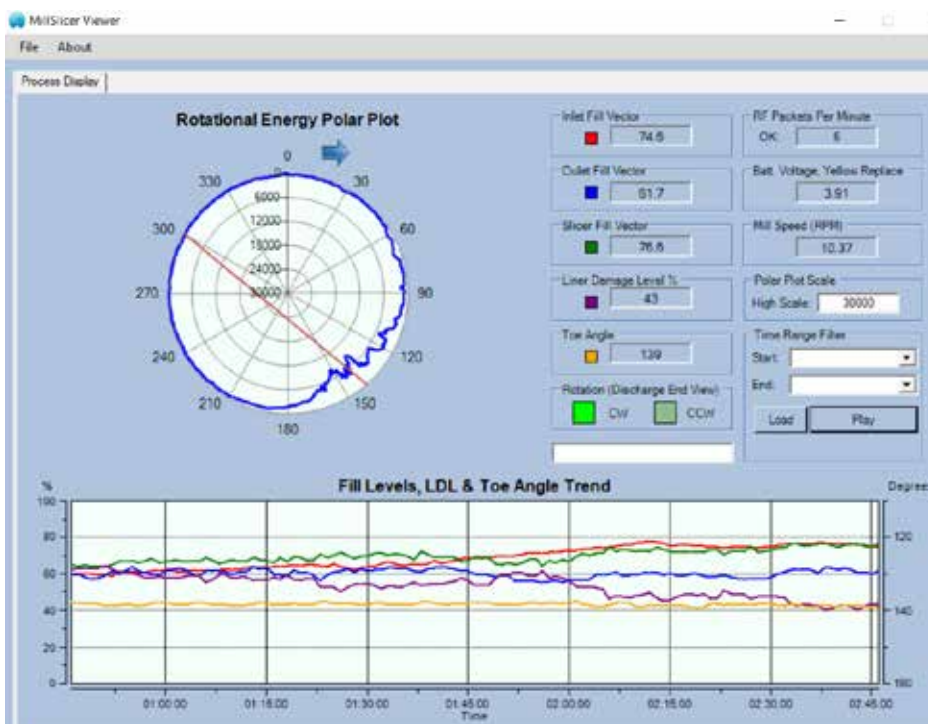
The signals can be used to help the mill operator to increase throughput and reduce the energy consumption per ton. The three cross sections also provide insights about the flow of material through the mill.

Benefits

- **MAXIMISE MILL THROUGHPUT**
Controlling the mill fill level rather than bearing pressure, or mill weight can increase milling capacity.
- **MINIMISE LINER DAMAGE & LINER WEAR**
The Liner Damage Level (LDL) signal can be used to help reduce the frequency of ball on liner impacts, thereby extending liner and media life.
- **IMPROVE MILL EFFICIENCY**
TriSlicer helps the mill operator to operate the mill such that balls are impacting on the charge, rather than the liners.

Shell Vibration Polar Plot

The polar plot indicates when the mill is being run too empty, too full, or too fast, by demonstrating the liner damage level on the polar plot seen below. Notice the purple (LDL) signal reducing as the fill level increases (green line).



Advantages over Acoustics

Compared to acoustic sensors, the TriSlicer provides the following advantages:

- Robust and reliable - acoustic is not ideal for mining environment due to dust and water/slurry spills.
- 5 measurement points with 360° of information for each of the three shell mounted sensors
- Zero cross talk (no influence from other mills and equipment)
- Measurements are more accurate and comprehensive
- Easier to install
- Low Maintenance.

About Us

Process IQ provide measurement and control solutions to improve throughput, recovery and efficiency for the mining, metallurgical and minerals processing industry. TriSlicer has been introduced to the industry for optimal SAG and AG mill operation.

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