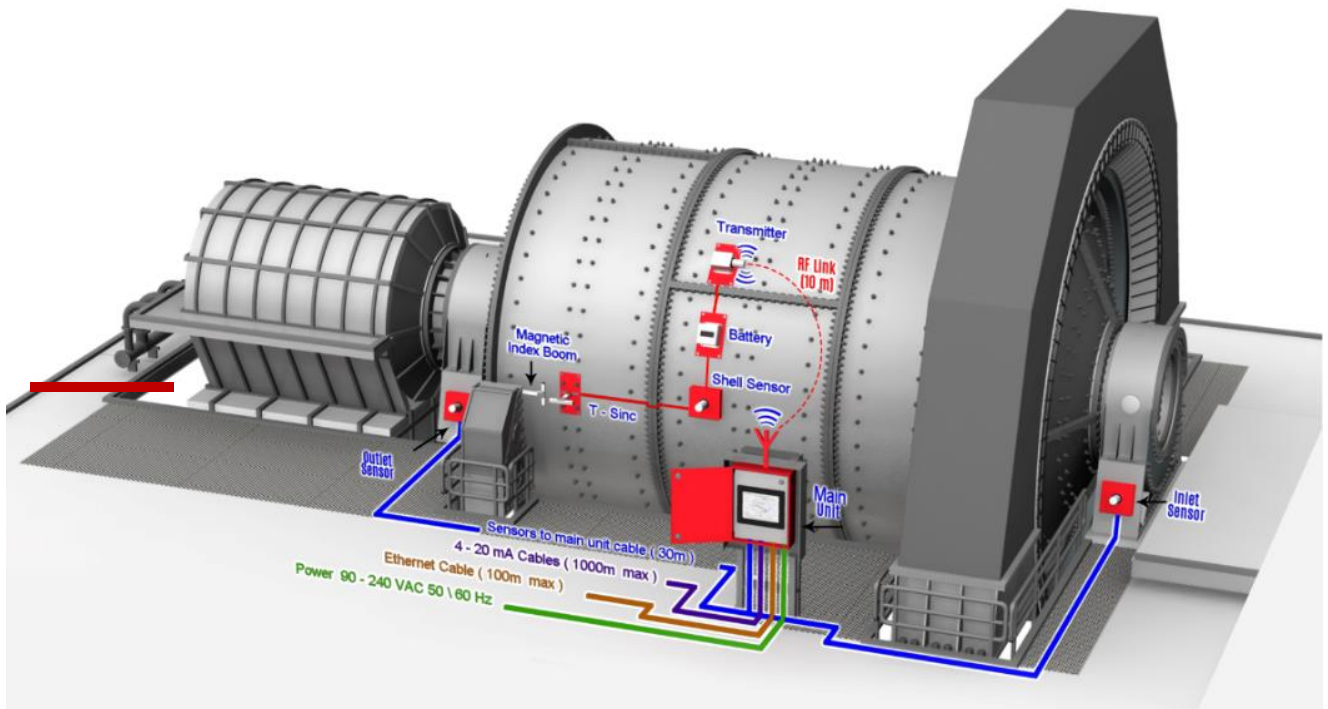




## MILLSLICER

“LOOKING INSIDE YOUR MILL”

COMPREHENSIVE 360° MILL VIBRATION ANALYSIS



### OVERVIEW

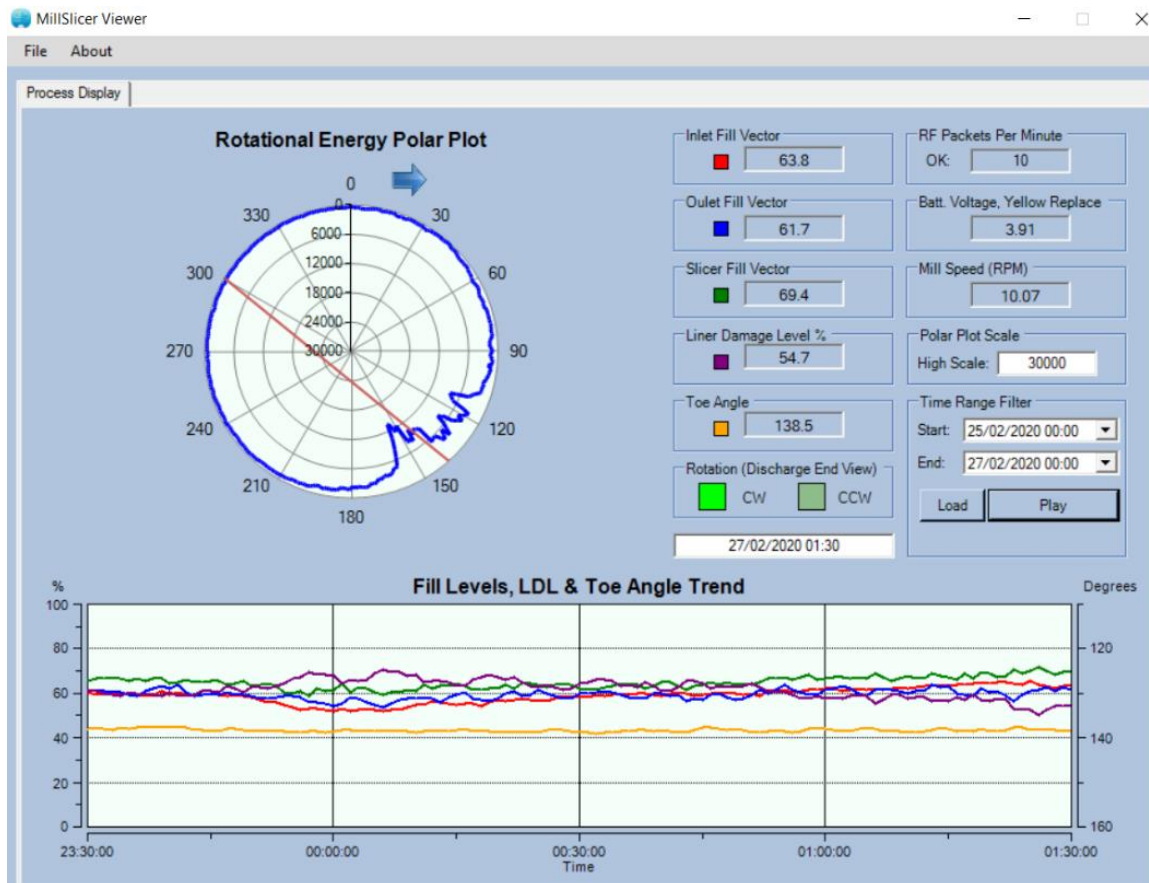
MillSlicer utilises vibration sensor technology and digital signal processing to output a charge toe position, shell, inlet and outlet fill level vectors and a measure of charge impact intensity (liner damage level). The MillSlicer software renders the liner damage level on a polar plot that provides visual feedback regarding the mill's operation. This feedback allows the operator to optimise the feedrate (and mill speed, if available) such that the frequency of ball on liner impacts is reduced and that balls are thrown onto the charge.

### BENEFITS

- **HELP TO MAXIMIZE MILL THROUGHPUT**  
Controlling the mill fill level rather than bearing pressure, or mill weight can increase milling capacity.
- **MINIMIZE LINER DAMAGE & 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**  
MillSlicer 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).



### About Us

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

### ADVANTAGES OVER ACOUSTICS

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

- Robust and reliable – acoustic not ideal for the mining environment due to dust and water/slurry spills.
- Zero cross talk (no influence from other mills and equipment).
- Measurements are more accurate and comprehensive.  
Low maintenance.

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**PROCESS IQ**