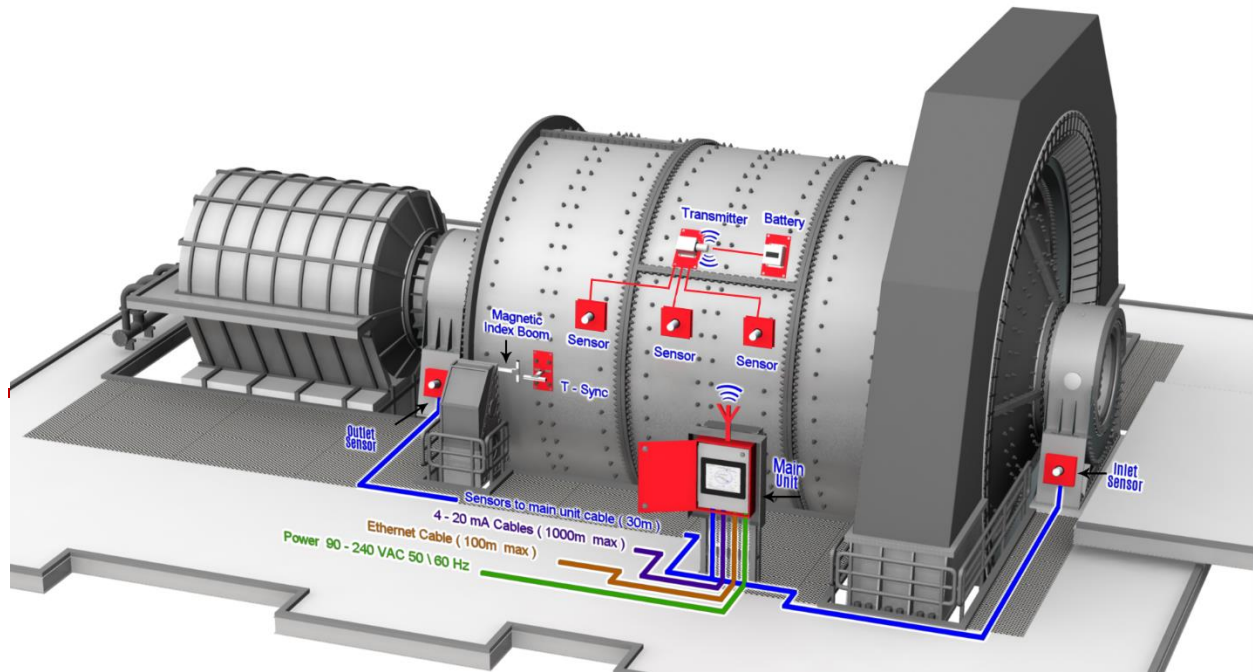




## TriSlicer

“LOOKING INSIDE YOUR MILL”

COMPREHENSIVE 360° MILL VIBRATION ANALYSIS



### OVERVIEW

Like the MillSlicer, the TriSlicer has been developed for the mining industry, specifically for use on SAG/AG mills.

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.

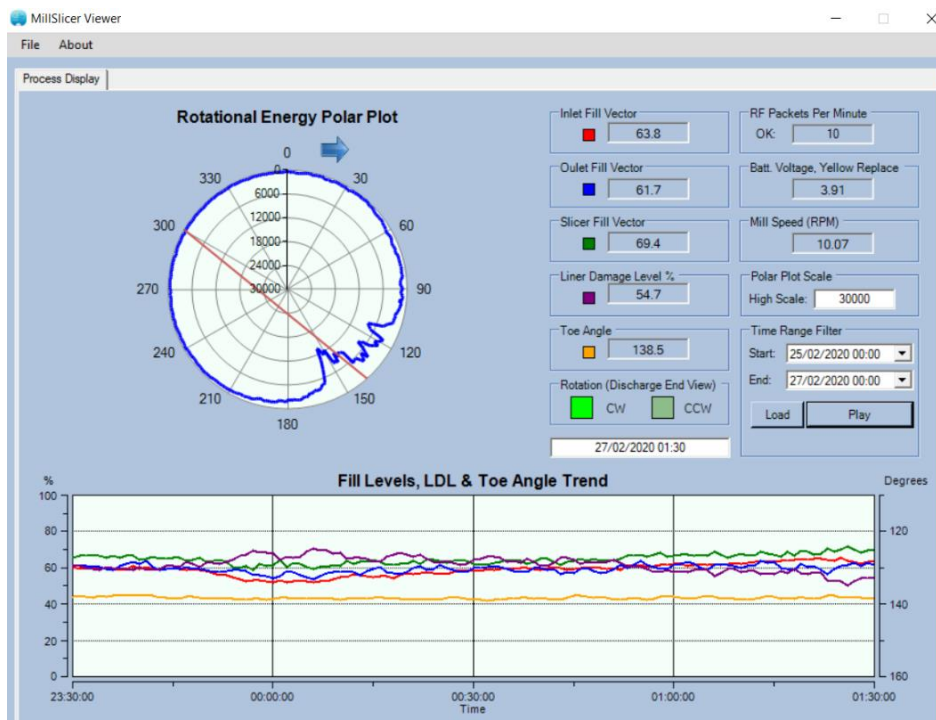
The signals can be used to help the mill operator to increase throughput and reduce the energy consumption per ton. The three cross sections also provide insights about the flow of material through the mill.

### BENEFITS

- **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.

### Process IQ Pty Ltd

Unit 1 / 23 Gibberd Road, Balcatta, WA6021 Western Australia  
Tel: +61 (0)8 9240 4357 | +61 (0) 407 851 679 | Fax: +61 (0)8 6316 0486  
Email: admin@processiq.com.au

[www.processiq.com.au](http://www.processiq.com.au)

Publication No: PIQ-TSLICE-BR001-EN August 2020

## ADVANTAGES OVER ACOUSTICS

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

- Robust and reliable – acoustic not ideal for the 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



**PROCESS IQ**