



BeltMetrics™

Easy and accurate 3D analysis of the material transported by conveyor belts.

BeltMetrics uses artificial intelligence and 3D (stereo) imaging to analyze the particle size and monitor the bulk volume of material transported by conveyor belts – **no belt cuts, calibration, or scaling objects required.**

Real-time analysis
that neither interrupts
production nor
requires belt cuts.

Features



Particle Size Analysis

Optimize crusher feed size with continual particle size analysis.



Empty Belt Detection

Detect empty belts to alert mines to blocked chutes.



Volume Sensing

Optimize production by continually measuring transported material.

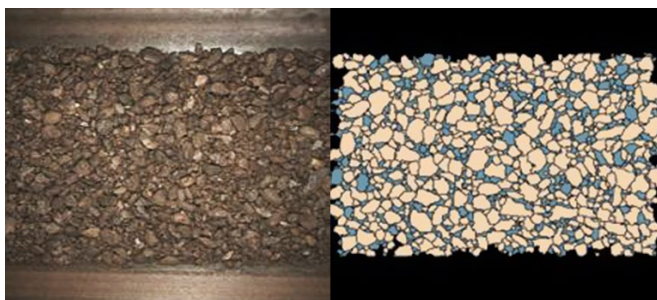


Load Profiling

Prevent uneven belt wear and conveyor damage with accurate load profiling.

Specifications

Minimum Detectable Rock Size (at 1.5 m)	0.9 cm
Depth Resolution (at 1.5 m)	0.3 cm
Maximum Fragmentation Processing Rate	1 measurement/minute
Camera Resolution	2,048 x 1,536 pixels (each camera)
Operating Temperature	-40 °C to 45 °C
Dimensions	(490 x 490 x 280) mm + customizable frame
Weight	17.9 kg (main assembly, excluding frame)



Particle Size Analysis



Empty Belt Detection



BeltMetrics™

How BeltMetrics helps an Australian mine **prevent contamination events**

This iron ore mine in the Pilbara uses the BeltMetrics particle size analysis and automated notification functions to prevent contamination events.

In this **sample report**, the site receives a notification from BeltMetrics indicating that oversized material has been detected. The mine then stops the belt and fixes the screen breakage so that normal operation can resume.

Mine-to-mill optimization begins with a clear understanding and ongoing assessment of blasting, crushing, and grinding operations. BeltMetrics is an accurate alternative to sieve analysis that doesn't interrupt production. Use particle size data collected with BeltMetrics to optimize crusher gap settings.

Particle size distribution timeline

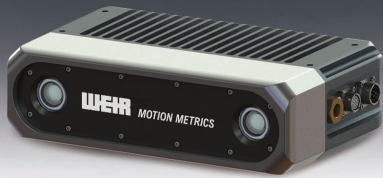


Oversized material detected

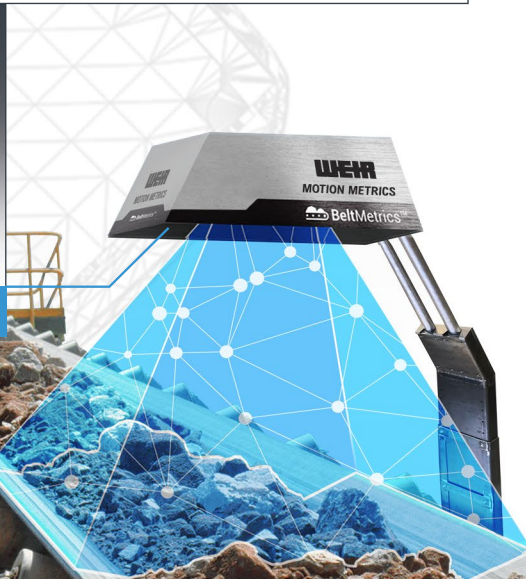


**Belt stopped
to fix screen
breakage**

Normal operation resumed



Rugged, Self-Cleaning 3D Camera



MetricsManager™ Pro

Like all Motion Metrics products, BeltMetrics interfaces with our centralized data analysis platform, MetricsManager Pro. Users with authorized credentials can access data summaries, in-depth performance reports, equipment activity logs, and particle size data from anywhere.