CODING METROLOGY

Measurement and Metrology Automation
*"A **TRUE MEASUREMENT** FOR **SUCCESS**"*

Laser Scan Mill Inspection

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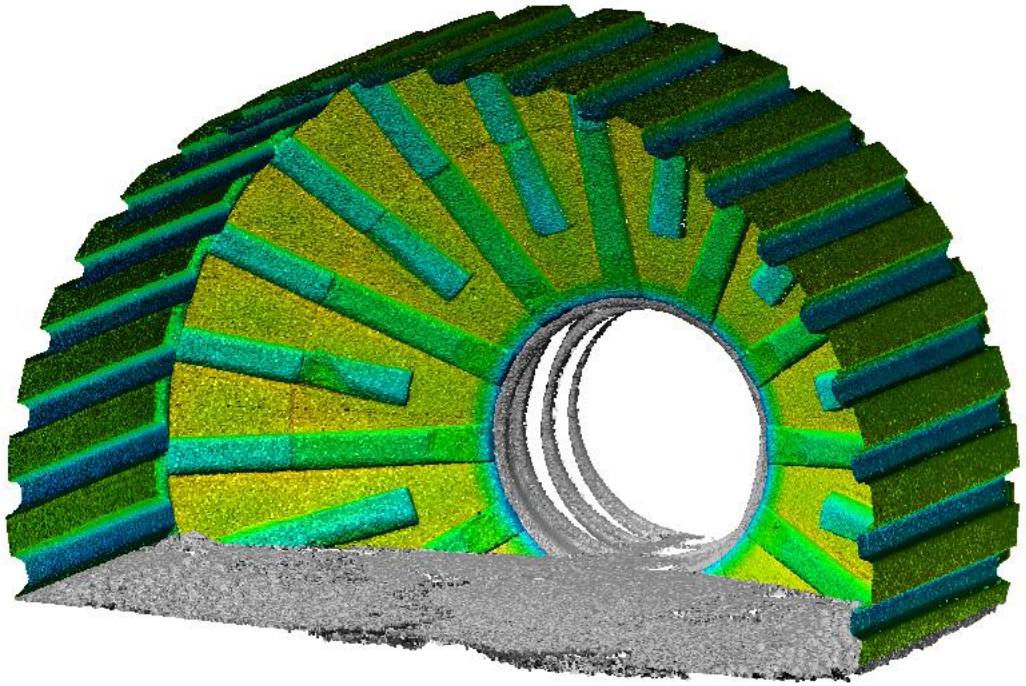

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Features and Benefits of Laser Scan Mill Inspection

FEATURES		BENEFITS
Analysis of every scanned liner		Reliable reporting of liner condition
Only one technician needed		Reduction of man hours and risks
Complete liner profiles from millimetres point spacing		Accurate liner analysis
Recognition of high wear regions		Realistic forecasting of liner life
Charge level calculations from millions of points		High tolerance results

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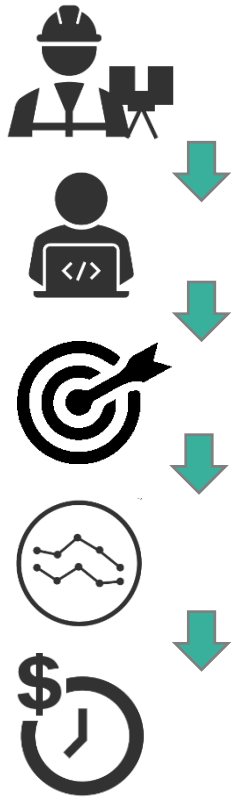
Intro to Coding Metrology Inc.

Coding Metrology Inc. is a Canadian owned Metrology services company offering premium laser scan and analysis services. We specialize in grinding mill and crusher wear component inspection for the mining industry. Our expertise is in wear tracking and analysis of SAG, Ball, and Rod mill liners as well as gyratory crusher liners.

We virtually and remotely train technicians to scan mills in a safe and comprehensive manner to reduce staff and shut-down time of operations; having done so all over the world. Laser scanners capture millions of measured points, data we analyze using premium metrology software and in-house developed methods and code to generate detailed reports. Each report is compiled and analyzed by our team to provide valuable feedback about operations and efficiency.

Our common deliverables are complete reports and recommendations that can be shared with team members from executives, metallurgy professionals, and technicians.



Scan mill

Automation technology

Quick, accurate & reliable scanning and analysis

Customizable reports

Mill efficiency improvements

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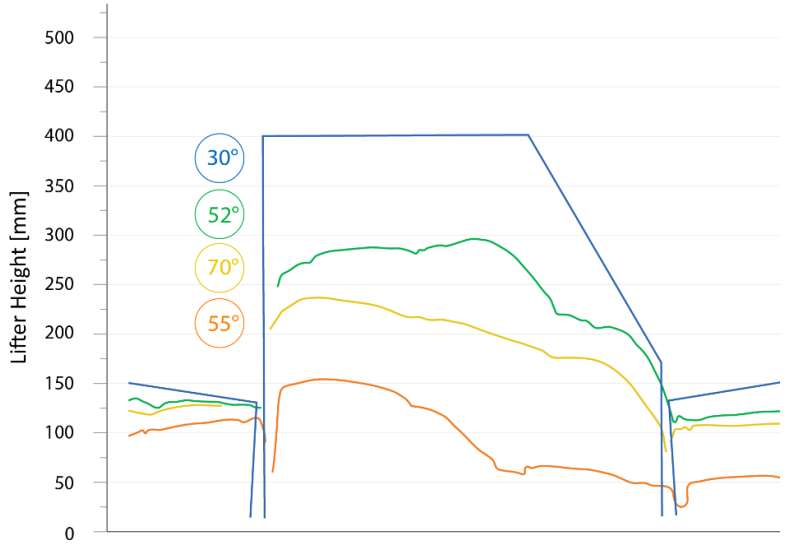
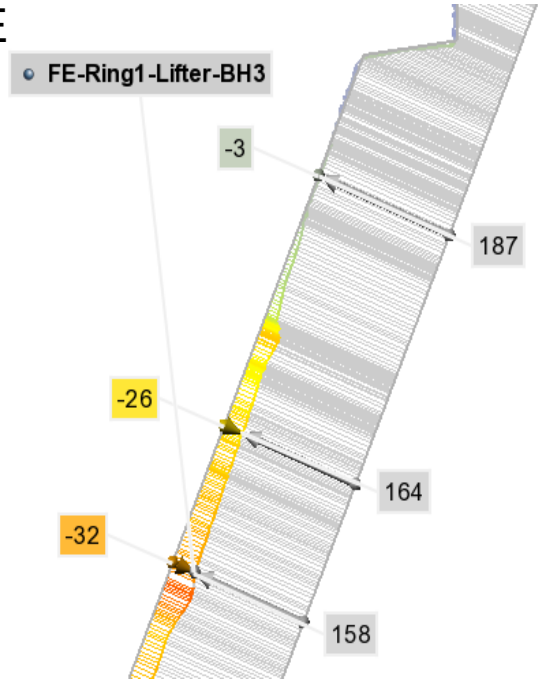
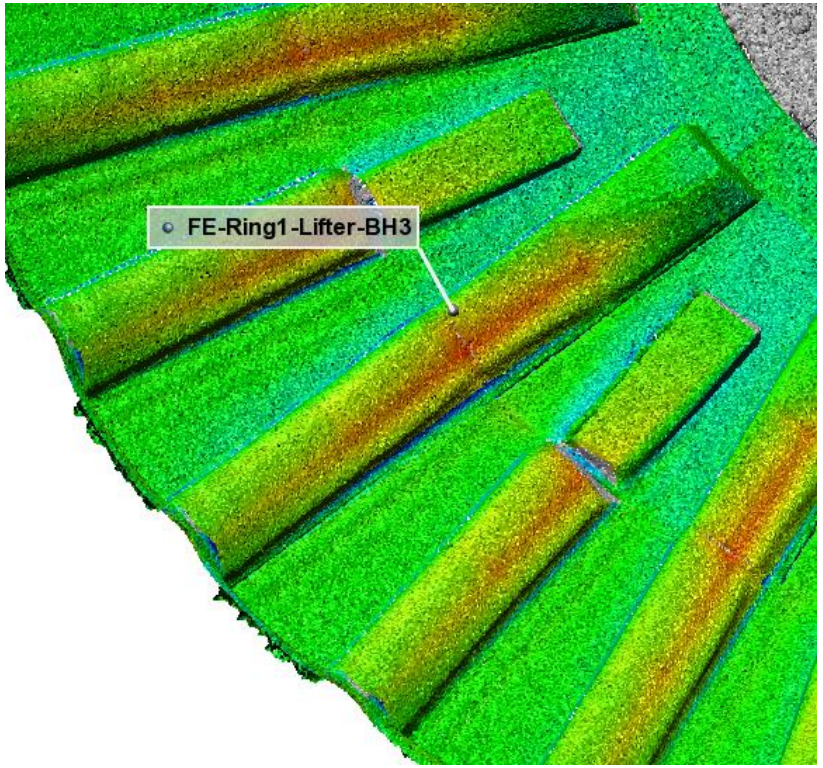
Mill Scan Data Processing

Analysis

- ACCURATE ANALYSIS OF LINERS
- EXTENSIVE LINER COVERAGE







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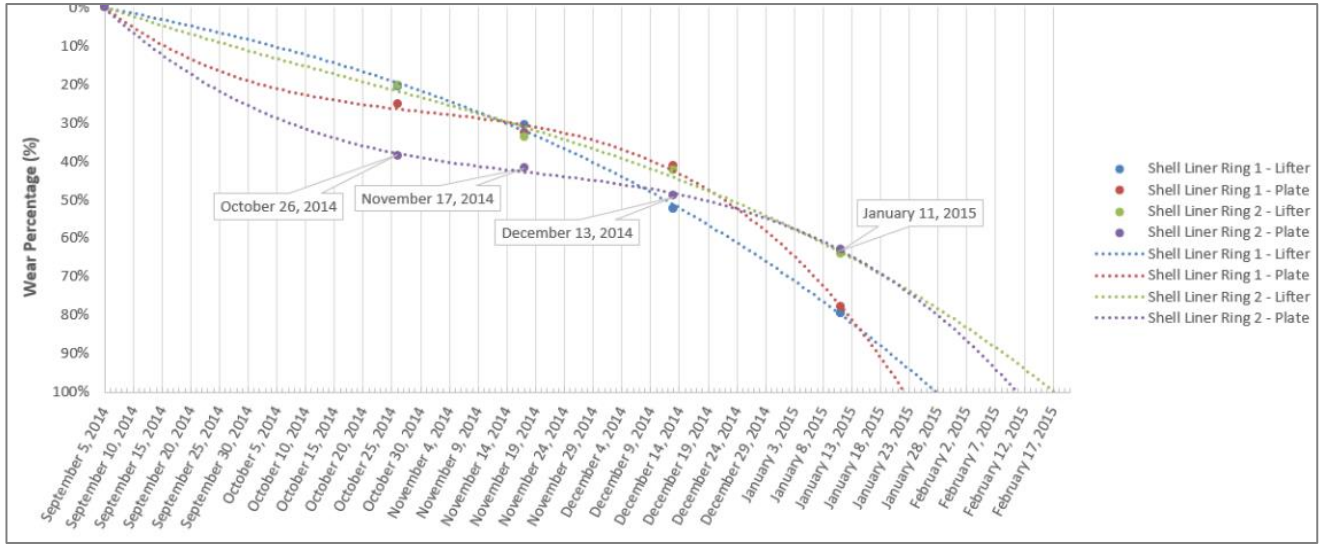
Algorithmic Liner Forecasting

- ACCURATE RELINE FORECASTING
- ABILITY TO USE FULL LINER LIFE
- REDUCE DOWN TIME & COST



It is recommended that the mills each be scanned five times throughput their respective liner lives, or once per quarter, whichever is sooner. Utilizing algorithms derived from present and historical data, the liner wear forecast dates are predicted with high accuracy. This allows the client to reline the mill exactly when needed, saving money on mill downtime, reducing overall milling costs, and using the liners to their full potential.

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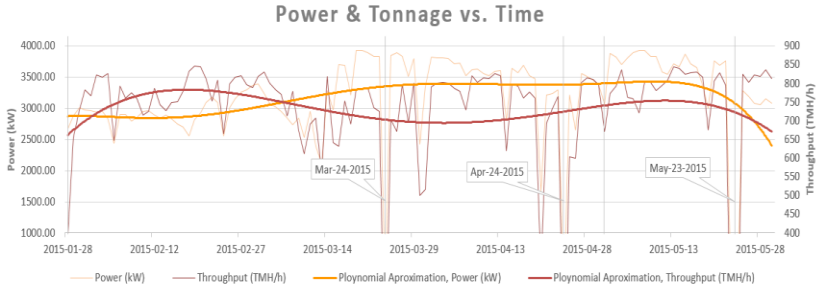
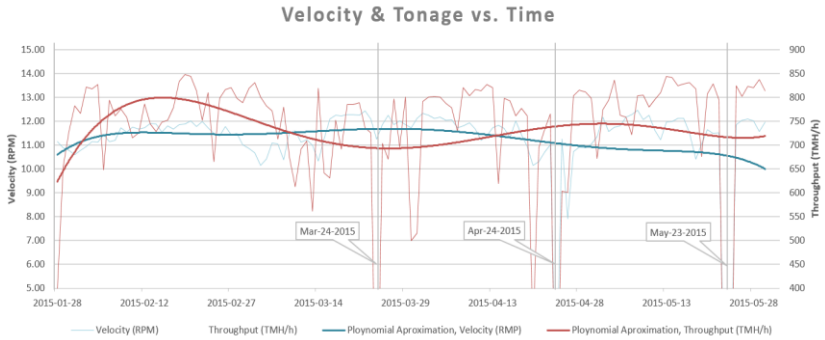
Optional Comprehensive Reporting

Power & Tonnage vs. Time

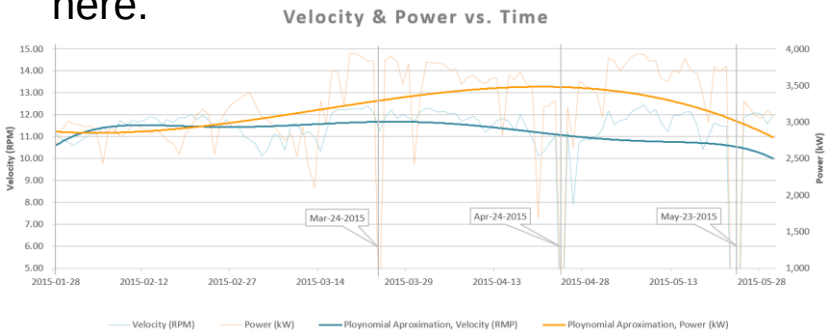
Production tonnage compared has not increased substantially toward the end of shell liner life. The mill efficiency seems to be quite low from March2015 onward, during times where it appears that charge levels were low.





Velocity & Tonnage vs. Time

It can be seen here that the mill speed was relatively steady during the first 3 months of operation, despite large fluctuations in throughput.

Velocity & Power vs. Time

As power draw increased significantly starting end of March 2015, mill velocity decreased with only slight gains in mill throughput. This is a focal point moving forward for the client, as efficiency losses appear to be greatest here.