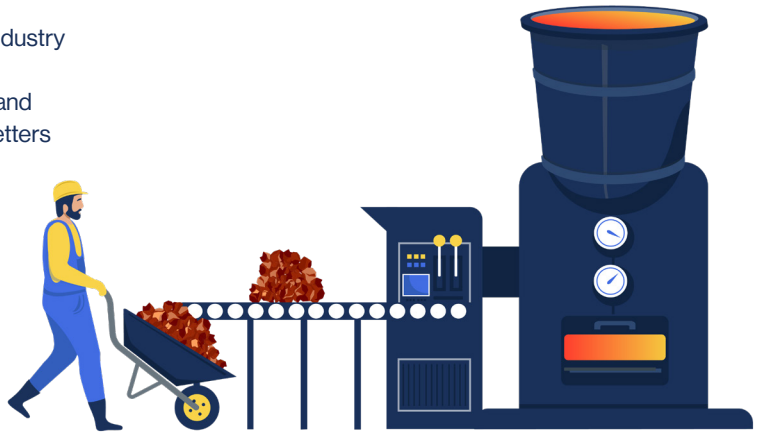
CASE STUDY

Forging Success: Portland Forge Increases Batch Production Time by Tagging 99.8% of Downtime

Company Profile

An American-based company, Portland Forge brings 100+ years of industry leadership to metal forging. A premier manufacturer and supplier of high-quality carbon, alloy, and exotic metal forged components, Portland Forge serves a multitude of industries with a variety of hammers, upsetters and presses. Their state of the art production systems enable a wide range of forge capabilities with high-reliability throughput and quick changeovers. The company's success is tied to providing innovative solutions and service needed to respond to today's supply chain demands — prioritizing safety, engagement and delivery to ensure sustainable client relationships.



Industrial, Batch Production

The Challenge

For Portland Forge and other batch-producing manufacturers alike, every producing segment is surrounded by events that affect production efficiency. These events aren't bounded by hours so an hourly breakdown of production data isn't the best way to analyze process efficiency across the shop floor. Portland Forge needed a method for operators to easily communicate information about their batch performance processes to supervisors that didn't distract them from their day-to-day responsibilities. By finding the right method, teams could work more efficiently while ensuring safety and top quality products were prioritized throughout the plant. Portland Forge needed a digital solution that could 1) provide complete and accurate production and downtime data and 2) give teams real-time visibility into the metrics that mattered to them, from anywhere.

The Solution

To achieve their OEE and productivity goals, Portland Forge chose Raven as their OEE improvement software to drive their shop floor processes by:

- Implementing an OEE software with rapid time-to-value to get the full picture into machine and people productivity
- Using a real-time, meaningful timeline of events created with machine/equipment data and operator context to account for 100% of production time and losses
- Monitoring real-time dashboards to guide continuous improvements on the lines and empower the frontline and management to have two-way, data-informed conversations to resolve production issues

By gaining real-time visibility into their individual lines, Portland Forge's frontline teams had the key metrics and information needed to improve their overall production performance. User-friendly smart assistants were placed on the shop floor, enabling operators to tag downtime reasons with a touch of a button and only asking them questions when machines didn't have the answers.

Raven combined and analyzed operator input and data from machine sensors to create a meaningful timeline of events — accounting for 100% of production time and losses. The timeline contextualized time segments to visualize throughput, setup time and wait times. With the full picture into production, supervisors received instant updates on uptime and parts produced with alerts guiding them to take action to eliminate any downtime issues as they happened.

Portland Forge also used Raven's Batch Count Radiator to understand performance and throughput of each batch independently, enabling operators to make critical productivity improvements. Batch progression provided value scheduling that ensured the rate, progress and expectation for a given batch — and provided data-led insights for the next iteration.

"You made my job so much easier. We are really satisfied with Raven and thank you for all of your help. Keep doing what you are doing."

— Bob Zeeb, VP of Operations, Portland Forge

The Results

After implementing Raven, Portland Forge celebrated many wins in just one month including:

- Tagging 99.8% of downtime, with Raven's operator-friendly UI and automated downtime labeling
- Reducing wait times by 4.5%, using operator context and contextualized event timelines to make shop floor improvements
- Increasing production time by 12% using real-time production monitoring and alerts to guide operations teams to take immediate action to resolve issues on the lines
- Increasing throughput by 9.3% by using the Batch Count Radiator to understand performance of each individual batch

About

Raven helps manufacturers empower teams to make confident, fact-driven productivity improvements in real-time. Raven's OEE improvement software is the only solution that accounts for 100% of production time, with meaningful context for every second. With its frontline-first design, Raven empowers operators to easily tag downtime reasons – only asking questions when machines don't have the answers. Raven combines operator and machine context to create a complete timeline of events, eliminating hidden losses.

Contact

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