# Integrated Operations, Proactive Equipment Maintenance and Digital Enablement Drives Productivity Improvements at Underground Salt Mine

## 01 | Challenge

Equipment utilization, throughput decline

The move from drill and blast to continuous mining wasn’t going as planned for one of the world’s leading underground salt mines. Limited equipment availability and poor utilization diminished productivity, while multiple leadership changes, a contentious three-month union strike and misalignment on targets throughout the organization led to frequent throughput shortfalls. The mine was operating at less than half of its potential which ultimately led to a 45% decrease in the company’s stock price.

## 02 | Solutions

Maintenance program restructure, digital enablement

After a detailed assessment, Myrtle Consulting began a 40-week transformation to increase throughput, optimize asset productivity and equipment reliability, and establish organizational alignment. The team:

- Analyzed all available operational data, created metrics with targets and developed and installed dashboards with data visualization targets from the ground level up to senior leadership
- Converted maintenance to a proactive, scheduled operation that is used strategically to control costs, maximize uptime and maintain critical equipment
- Implemented best practices in planning, integrated scheduling and execution between production, maintenance and ground control to increase equipment availability, improve resource utilization and reduce conflict between groups sharing the equipment
- Applied a combination of best in class mining practices and time-tested tools and methods to improve Overall Equipment Effectiveness and implemented a glide path to capture, analyze and mitigate production losses
- Restructured the process for pullbacks and equipment overhauls through SMED workshops and changes to the management system to drive accountability and reduce downtime

## 03 | Results

With new processes in place, the company met and maintained its monthly production target for the first time in five years, causing its stock price to quickly climb. The methodologies and practices implemented by Myrtle Consulting led to the company hoisting 25% more tons per day and increased average equipment run time by 17%.

Integrated planning, scheduling and execution between production, maintenance and ground control increased productivity and improved coordination. Proactive maintenance of critical equipment raised availability of the continuous mining fleet by 28%. Also, restructuring processes for pullbacks and equipment overhauls decreased the duration of pullbacks from 14 to 7 days and overhauls from 27 to 14 days per continuous miner.

Improved communication, accountability measures and a structured management system drove sustainable organizational alignment.

“I had my reservations initially about whether the results could be achieved. This program made me a believer in ‘the Myrtle difference’.”

- SVP, Salt Division

To learn more about how to enact change within your organization, send an email to info@myrtlegroup.com or visit myrtlegroup.com

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