

ERM Case Study:

A strategy to fundamentally improve safety and operational performance

A mining company's new approach to safety excellence continues to drive operational performance improvement.

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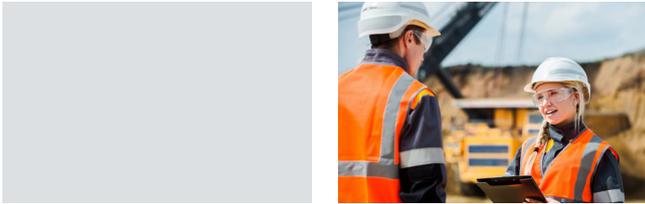
Confronting stalled safety performance

Executives at one of the world’s leading companies (hereafter referred to as “MineMetal Co”) found themselves in an all-too-common situation for higher risk industries: a plateaued overall injury frequency rate and an unchanging fatality frequency.

MineMetal Co’s injury frequency rate had plateaued to an average of five people injured every day in its organization of 50,000 employees.

A global safety culture, seen as a necessary catalyst for safety excellence, eluded them. Corporate-wide safety initiatives struggled to be embraced and sustained at their hundreds of worksites across six continents. Despite best efforts, the company’s leaders were not sure of their next move to improve performance.

Given the size of the organization and the breadth of its operations, MineMetal Co’s leadership recognized the enormity of its challenge and sought outside guidance.

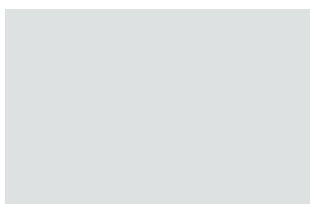


Piloting an approach to turning safety performance around

In 2009, MineMetal Co began working with ERM, the world's leading sustainability consultancy, to develop a change process with two critical objectives: getting on a fast track to turnaround safety performance and embedding a culture of safety excellence throughout its operations.

The team implemented a strategic approach that was designed to establish profound, sustainable improvements in safety performance at the site level through employee and leader collaboration, mutual understanding and new insights. Since 2009, MineMetal Co has employed the approach at more than 25 of their sites around the world – delivering results that stretch beyond safety to the core operations, with process efficiencies and cost reductions made possible by improvements in planning, scheduling and equipment maintenance.

Insights from the initial “deep dive” into the prevailing state of safety and its root causes across MineMetal Co's portfolio in 2009 provided a firm starting point. Over a decade of deployment and refinement, a proven approach emerged that continues to enable the local management team to diagnose and respond to site-specific organization, operational and leadership roadblocks.



Building a global safety culture through teamwork and leadership commitment

Each site engagement began with an intense two-part intervention: **i)** a two-week diagnostic phase that built understanding and acknowledgement of the unique obstacles to safety excellence; and **ii)** a collaborative design phase that created solutions for the three to four critical issues that needed to be solved for safety to thrive. The design phase was a carefully structured two-week process to support and advise leaders as they developed their own detailed plan for addressing opportunity areas.

Both the diagnostic and design phases were driven by a core team comprising MineMetal Co's senior site leaders and eight to fifteen operators, maintainers and contractors – individuals who were hand-selected for their credibility with management and their respected reputation for “calling it like it is”. ERM team members with expertise in change management, safety and operational performance guided the core team through each phase of the process. Once the design phase was complete, the site's real work kicked in with implementation. This was the moment that MineMetal Co's leadership needed to truly demonstrate its engagement, as the employees looked on to see if the commitments made during the design and planning phases were “for real”.

Teamwork for meaningful change

Each intervention was driven by a team that included members of both the site's leadership group and rank-and-file employees, selected for their skill as “change agents”.

Working together, MineMetal Co's managers and employees:

- fostered understanding and alignment
- removed barriers
- created a case for substantive change
- built lasting relationships.

As a result, long-term commitment and results were created, that continue to be witnessed today.

Confronting safety obstacles

Throughout the intervention previously taboo topics were brought to light, as obstacles related to people dynamics were uncovered and discussed. Individuals typically underwent a degree of personal discovery and re-framing as it became clear how they were personally hindering a “no harm” workplace.

In the diagnostic phase, MineMetal Co leaders learnt how their words and actions influenced safety, both positively and negatively. Workers learnt the stresses that supervisors faced, and the competition for time and resources they dealt with daily.

Both groups gained a deeper understanding of the challenges the organization faced and a greater appreciation for how they could work together to set work teams up for success every shift.

The issues that surfaced through the diagnostic phase were not minor findings requiring quick fixes – they were systemic challenges that, in addition to safety, were constraining underlying operational effectiveness. Similarly, in the design phase, sites did not tackle the identified issues incrementally; rather, they planned for ambitious and transformative change, reflecting the major obstacles that were preventing world-class safety performance.

Over the course of MineMetal Co's program, the underlying dynamics of each site's operation were probed. In all cases, this raised new insights about the site and its people. Although such insights can be confrontational and are often easily dismissed out of misunderstanding, fear, or ignorance, the program was structured to avoid this. It provided a facilitated environment to prompt the courageous conversations that were needed to address the issues that no one felt they could raise, let alone resolve.

The self-awareness and courage generated during this process, coupled with demonstrable actions by leaders on their commitments, reinforced the direction towards safety excellence and the momentum built. Through ongoing annual "health checks" ERM continued to guide and refresh each site's work, keeping their efforts on track.



A track record of positive results

When MineMetal Co first engaged ERM in 2009 their worldwide All Injury Frequency Rate (AIFR) was 1.2, which translated to approximately five workers injured every day. After 10 years, supported by the successful uptake and implementation of this co-designed approach, that number was reduced to an industry-leading 0.4, and MineMetal Co had achieved marked improvements towards the elusive but achievable goal of eliminating worksite fatalities.

Executive leadership credited the approach, now known as ERM's Accelerating Facility Safety (AFS) process, for driving improvements in both safety and operational excellence across different operations, geographies and cultures. This is evidenced by positive feedback that has been received since the implementation of the AFS approach at MineMetal Co. A senior executive, for example, congratulated a facility leadership team on their success with implementing the approach, noting "not only have you had zero injuries so far this year, but you have created a fundamentally better business".



MineMetal Co success stories

AFS has been successful in enabling operational leaders to transform the performance of their organization up and down the mining value chain. The result has been dramatically improved performance across all safety metrics, as well as improved contractor and union relationships plus operational stability. Here are four of the many individual site success stories achieved by MineMetal Co as a result of AFS.



Regaining excellence in exploration

Historically, MineMetal Co's exploration group was regarded as one of the best in the industry. However, in recent years, the group's reputation and business performance had slipped; its overall effectiveness was in question, and its safety results were poor.

The leadership team embraced the AFS process as a way to reverse these concerning trends. The work in response to the initial assessment fundamentally changed the effectiveness of the group's operations. Process efficiency was enhanced through a step change in planning thoroughness, strong plan execution and cost avoidance from in-field workarounds. Safety results improved dramatically – moving from the bottom quartile among MineMetal Co's functions to the top quartile. The group's efforts and results culminated in receiving the company's global safety excellence award. Five years after the initial engagement, the Group Executive accountable for Exploration reflected, *"that work had a profoundly positive impact across Exploration that carries forward to this day"*.



Transporting, safely

A sea and land transportation division of MineMetal Co provides business critical logistics services for in and out-bound materials and product for numerous production facilities.

In the year prior to the AFS intervention, the business had an AIFR of 2.0 and suffered a fatality. The new General Manager joined the division in 2014 and made it an imperative that the resources to run the AFS process were provided. The General Manager and the management team were highly committed to the process and the subsequent implementation work.

Two years later, the division was awarded the company's global safety excellence award for improved performance. At the awards ceremony, the company's CEO complimented them on the fact that they had had zero injuries in that year and in doing so, had improved the fundamentals of their business.

Three years after receiving the award, the site achieved a full calendar year of zero injuries.



Back to operational basics in the USA

For years, corporate safety initiatives had failed to take root at one of MineMetal Co's sites in the USA. Managers rarely saw the benefit of these initiatives and often viewed corporate programs as simply adding to their workloads. Employees were distrustful and lacked confidence that the company was serious about safety.

The AFS diagnostic uncovered these deeply-held beliefs and more, including the critical reality that the root cause of safety issues was a lack of operational planning and execution. Schedules changed frequently, and work teams were asked to deliver without the proper training or tools, or properly maintained equipment. There was general discord; workers felt like each day was an exercise in "putting out fires". Given this chaotic environment, corporate safety programs had no impact because both managers and workers were distracted and overwhelmed.

Following the AFS diagnostic, key work streams were developed and implemented to: **i)** improve the condition of the site; **ii)** improve planning and scheduling; and **iii)** reduce equipment and process failures.

These operational enhancements made it possible for employees to focus on safe work practices, ultimately leading to significant improvements in safety performance. After several years of improving results, the site was recognized with the company's global safety excellence award.



Rebuilding credibility in Africa

Seeking to recover declining safety performance, senior managers initiated a program that put themselves in the field, checking and directing employees.

The AFS diagnostic, however, identified that this approach was having a counterproductive effect on safety as workers interpreted it as a lack of trust. Rather than building alignment, the program was undermining managers' credibility.

Following implementation of the AFS, managers changed how they "showed up" in the field and began communicating more frequently with workers to understand and remove barriers to excellent safety performance. The AFS design phase team created a more appropriate forum for interaction and communication between managers and workers and helped the management team rebuild its credibility.

Managers were no longer perceived as trying to show workers how to do their tasks; instead, they worked side-by-side with employees in an appropriate manner to facilitate a more productive, safe worksite.

Conclusion

MineMetal Co's experience demonstrates that safety performance can be improved – even in the most challenging of circumstances – when leadership is committed to understanding and overcoming the unique obstacles that are undermining performance.

“This approach has provided the deepest dive the business has ever undertaken into leadership and operational effectiveness”

- MineMetal Co Executive

Similarly, the establishment of a robust safety culture, consistent across a business, requires the commitment and buy-in of the leadership team, and is a necessary component to achieve safety excellence. Aside from the unquantifiable and paramount positive of having your employees reach home safely after work, the benefits of such improved safety performance and culture include reduced costs, improved work environment, as well as process efficiencies – and ultimately, enhanced operational performance. In the case of MineMetal Co such improvements were driven through AFS, and resulted in broader, deeper and more sustainable improvements that continue to manifest across their operations today.



About ERM

Around the world, ERM delivers sustainable solutions for clients by helping to improve their business, organisational, and environmental performance. ERM has more than 5,000 people in over 40 countries and territories working out of more than 160 offices.

ERM helps our clients achieve immediate reductions in risk and sustained improvements in safety performance. Companies worldwide partner with ERM, drawing on our 40 years of industry experience to help them extract much greater value from their existing safety programmes, processes and tools. Combining technical expertise in risk, process and occupational safety, human factors and information systems with a focus on leadership culture and behaviours, we will work with you to achieve the full benefit of your safety investment – safeguarding lives, assets and reputation.

Furthermore, ERM understands the challenges mining companies face. Having been deeply involved in the sector for many decades, we have successfully assisted clients to navigate through and emerge quickly from multiple downturns. As a result, we can help our clients develop a clear strategy and associated tactics for their operations at group, division and site levels in order to protect and create value. ERM enables our clients to achieve faster, better, safer, cost effective and more responsible mining.

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