

We have come to the end of another year, and it is the time to slow down and take stock of the 12 months that have passed and to look forward to the year ahead. In the South African mining industry a very traumatic 2012 has been followed by an uncertain 2013. I would like to think that 2014 will be more positive. There are many positive indications, and we should dwell on these since the negatives have a tendency to obscure the positives.

I attended the 2013 MineSafe conference in my capacity as SAIMM President, and I have to say that the way safety in the mining industry is approached is really inspiring. I was taken aback by how many mines had a 12-month period without a single injury. Zero Harm is not a dream, it can be reality.

Looking at how all the stakeholders in the mining industry approach safety made me think – if only the same approach was used for the economic and social aspects of the industry. The SAIMM is a proud co-organizer of the MineSafe conference and this will continue to be the most significant mine safety event each year in South Africa. I was, however, disappointed at how few metallurgists attended the conference. As a metallurgist I appreciate that mine safety concerns mining engineers and metallurgists, and both groups contribute to the safety improvements that the industry has seen. I will therefore be encouraging my fellow metallurgists to attend and to contribute to MineSafe 2014.

South Africa is a significant player in the global mining industry, with the world's largest mineral resources by value. South Africa is in the world's top ten producers of gold, platinum, coal, iron ore, manganese, chromium, vanadium, nickel, titanium, zirconium, and diamonds. Technical practice and innovation in the mining and metallurgy disciplines are world class. Underground mining in South Africa has no equal, and we are the global benchmark for underground mining. For metallurgy we can tick all the boxes for processing intensity for all the commodities. We produce high-purity metals and minerals. We produce mild steel, stainless steel, and ferroalloys. Therefore, it is correct to say that the South African mining industry has a solid production and technical foundation.

To build on this foundation we have to improve our competitiveness. There are, of course many, definitions for competitiveness. From a mining industry perspective we need to produce metals and minerals that are in demand. We need to produce a wide range of commodities, which introduces economic flexibility. These two aspects are satisfied currently and should continue to be so. Ideally the cost of producing metals and minerals should be targeted for the lowest quartile. Reducing cost is not only about reducing consumption and finding cheaper consumables, it is also about improving efficiency.

One aspect of efficiency that does not receive enough attention is the question of operational stability and consistency. Is there always enough ROM ore stockpiled so that there are no unnecessary plant shutdowns? Is ROM ore grade and particle size consistent so that plant operation can be stable? These two questions involve effective and continual communication between mining engineers and metallurgists. Is the plant designed such that consistent stable operation is possible? This is about process design flexibility, because metallurgists should be well aware that the ore does not always behave the way you expect it to, and you cannot always blame the mining engineers! Is the plant designed such that equipment availability is maximized? This involves effective and continual communication between metallurgists and maintenance engineers. All these aspects around efficiency ultimately point to one over-riding conclusion –consistency depends on teamwork!

This leads me to my proposed New Year's resolution for the South African mining industry, teamwork. Geologists, mining engineers, metallurgists, and maintenance engineers need to come to the mine efficiency party and they need to embrace teamwork to realize the goal of stable and consistent mine operations.

To close I would like to wish all SAIMM members and their families a safe and enjoyable holiday. May you return to work safely in 2014 and look forward to a positive and productive year.

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