

Mining looks ahead to more Covid risk

By Ralf Hennecke 8 Jan 2021

As Covid-19 disruptions continue to plague southern Africa - and with no end conclusively yet in sight - leaders in the mining sector will be pushing the application of technology in 2021, while also securing their supply chains to mitigate risk.



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Southern African mines and their supplier networks have generally managed well with adapting to the various lockdown levels during 2020. However, we are far from out of the woods, and the changes underway in the sector are changing the landscape forever.

High-tech solutions

Key among the impacts of the Covid-19 pandemic has been a marked acceleration in the application of digital and other technologies in the mining sector. This process has certainly been underway for many years, but 2020 saw the pace intensify. Much of the focus has been on using technology to meet the immediate demands of lockdown regulations – such as virtual meetings, remote working and sharing data from the cloud.

At the same time, high-tech solutions that delve much deeper into mining and mineral treatment processes are gaining more traction than before. These are the steps that hold the most important benefits for mining in the long term, and include digital technologies that monitor, automate and optimise operations. In this context, the gathering and analysing of big data – on every aspect of a mine from drilling and blasting to mineral treatment and environmental management – is fast becoming the focus of much research and development.

Collaboration

The first year of Covid-19 has reminded us that mining is really an ecosystem rather than an activity. Mines are only as strong as their supporting networks of suppliers and technology providers. As mining operations commit more resources and attention to innovation and sustainability, they need to be able to draw on a depth of expertise among their major supply partners. In the world of technological evolution, this is requiring considerable give and take; indeed, it is changing the nature of the relationships between mines and their key suppliers.

Collaboration is now the buzzword, and with good reason. Very few effective solutions in the digital space can be off-the-

shelf; every mine has its own specific conditions to manage, and its own existing systems and approach. In our experience, that means that listening is as important as delivering. It also means that suppliers must be increasingly geared up to innovate collaboratively with customers. The year ahead will see mining companies continuing to reach out proactively in search of customised digital solutions for higher productivity and long-term sustainability.

Supply chain

Another vital ingredient in this mix will be supply chain security, as it is not sufficient to develop innovative solutions if these cannot be reliably and consistently delivered. In the context of Covid-19, this means a re-focus on local procurement if the risks associated with future lockdowns and border closures are to be mitigated.

The past year has shown that southern Africa is to a large extent well equipped with a competent mining supply sector – demonstrating world-class standards and performance. This interlocks with the world-leading requirements of major global miners operating in the sub-continent, who are continuously in search of productivity-enhancing tools.

Local content

Of course, there are regulations and codes of practice in countries like South Africa that prioritise local procurement as a national imperative for inclusive growth. We may also have the pandemic to thank, however, for the closer attention now being paid to dangers implicit in long and loosely managed supply chains. This is particularly the case with large and complex componentry sourced from geographic regions traditionally considered as well-resourced and resilient to disruption.

It is not out of the question that 2021 will see shortages of certain proprietary equipment and spare parts manufactured in Europe and North America – many items of which could be mission-critical to mines in southern Africa. Such a scenario may not yet have been considered, but there are signs that some mines are already alive to it. The challenge will be for local industry to step up to the plate in those cases where local manufacture can be considered.

As in the case of the research, development and commercialisation of technology solutions, it is likely that we will see increased and fruitful collaboration between mines and a range of home-grown businesses in coming years. This will be good for the industry, the broader economy and the country as a whole. So, the supply sector needs to continue raising the bar, and leveraging the technological assets of the digital age to keep mining safe, competitive, sustainable and responsible.

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