

# Control Tower takes remote online customer support to new levels

Epiroc South Africa is proud to announce the launch of its state-of-the-art Control Tower, a collaborative space specially developed to enhance remote customer support capabilities and to further explore and optimise the company's digital and automation technologies and information management solutions.

“When customers invest in Epiroc machines and technologies, they want to know that we are a trusted partner armed with all the necessary capabilities to support them,” says Kumeshan Naidu, Regional Automation Centre (RAC) manager at Epiroc South Africa. “From our Control Tower, and with the customer's permission, we have access to near-real time data of our customers' smart machines: irrespective of where in the world they are operating. By being 'virtually present' at our customers' sites they can rest assured in the knowledge that we are 'close by' and ready to act swiftly. This is how we further strengthen our customer relationships,” he continues.

“We therefore had a number of clear objectives in mind when we decided to invest in the high-tech Control Tower, which is based at the Epiroc head office in Jet Park, Johannesburg,” continues Naidu. We wanted to establish a platform to showcase our extensive digital and automation technologies as well as our competencies and capabilities.

“We also wanted to create a simulated training environment and, most importantly, the Control Tower is well-aligned with our strategy to improve remote support services to customers by gaining a better understanding of their requirements. The more remote support we can offer, the better utility customers can get out of their machines at lower



Kumeshan Naidu, Epiroc South Africa's RAC Control Tower Manager: “This collaborative space has been developed to enhance our remote customer support capabilities,” he says.

operational costs,” Naidu adds.

He also draws attention to the fact that this remote access capability was particularly pertinent during COVID-19 restrictions. “Despite the fact that we were not permitted on site during the isolation period, we were still able to assist our customers seamlessly. Even in a post-COVID environment remote access delivers immediate results.”

Epiroc, with its smart machines and advanced technologies and systems portfolio, is a significant partner on a mine's digital and automation journey. Machine health monitoring, remote operation and automation technologies such as CERTIQ Telematics, Mobilaris

Mining Intelligence (MMI) and Rig Control Systems (RCS) optimise machine performance and lifecycles. They also create safer working environments, improving uptime, productivity and, ultimately, profitability for customers. Forming part of Epiroc's after-market portfolio, the Control Tower functionalities are relevant to all smart OEM machines equipped with these technologies.

CERTIQ is a cloud-based solution from Epiroc that is centred around data collection by IoT devices. Naidu explains that all the raw data from CERTIQ is collected, then accessed via a web-based customer interface or application programming interface (API) and

then visualised via a business intelligence (BI) platform in the Epiroc Control Tower.

“Our objective is to extract more value from this data and to share productivity data, machine health statuses and alerts or warnings with our customers. Deeper investigation into the data sets alerts us to potential problems, upcoming services or uncharacteristic behaviour of the equipment, thereby priming our support teams for proactive engagements that could potentially reduce downtime and improve productivity through higher machine availability.”

Mobilaris is a leading multi-role 3D location-based decision support system that enhances the safety, productivity and efficiency of mining operations by allowing the location and movement of workers, vehicles and equipment to be visualised in real time. A complete Mobilaris demo has been set up in the Control Tower that can take customers through all the system's capabilities and functionalities. “With permission from the relevant site owner, we are able to visually show the customer's active site from the Control Tower, enabling us to get a sense of current events at that mine in that moment. By working remotely in partnership with customers' strong IT teams and technology champions, we can assist them with trouble shooting, right here from the control tower so that the system's functionality is never impaired for long.”

Naidu points out that all these cutting-edge technologies and systems installed in the Control Tower, provide an opportunity to upskill both customers and Epiroc employees. Although the Epiroc Control Tower is currently geared for in-house training, Naidu alludes to future plans that will involve training for customers. “As the Control Tower presents a simulated training environment, we will be able to support



The Control Tower, the first of its kind on the African continent, was established with three core objectives: as a platform to showcase Epiroc's extensive digital and automation technologies; as a simulated training environment; and, most importantly, to improve remote support services to customers.

theory with practical hands-on experience by giving our customers the opportunity to 'explore and operate' remotely operated and automated Epiroc machines.”

The formal inauguration of the Epiroc Control Tower, which is the first on the African continent, took place via a live stream on 10<sup>th</sup> September 2020, complete with a virtual ribbon-cutting ceremony. Hosted by the RAC team, the virtual event showcased some of the Control Tower's capabilities. In addition to various live, remote feeds to customer sites and equipment, participants were also given a quick review of real-time data and analytics dashboards. The first Control Tower was inaugurated two years ago at Epiroc's facilities in Örebro, Sweden, followed by Chile. A Control Tower is currently under construction in Canada with plans underway for one in China

[www.epiroc.com](http://www.epiroc.com)

## 3D scanning paves way to quality chute solutions

With the power of three-dimensional (3D) scanning technology, transfer point specialist Weba Chute Systems & Solutions ensures there are no surprises when designing and installing its solutions.

“The accuracy of 3D scanning means that we can rapidly gather detailed measurements of large infrastructure on a customer's site,” says the company's technical director, Alwin Nienaber. “This data allows us to generate highly accurate 3D models of on-site conditions, which refines the accuracy of the equipment and componentry we develop and install in that environment.”

Greater accuracy keeps rework costs in design and manufacturing to a minimum, and reduces any downtime during the installation phase. Detailed 3D scan data allows all elements of the existing infrastructure to be considered during the preliminary design stage, so that the customer is assured of a reliable costing in a project's early feasibility stages.

Nienaber highlights that there may be numerous deformations or undocumented alterations in the customer's existing infrastructure that could complicate the design and execution of a project. Manual measurement of dimensions may also not deliver the levels of accuracy required.

“Especially when we are replacing transfer points or chutes, we can significantly de-risk the process with our capacity to reverse-engineer the solution within the existing constraints,” he says. “The scanned data is superimposed on our design intent, alerting us to interference that will disrupt smooth installation.”

One of the key advantages of 3D scanning, therefore, is that it contributes to the level of certainty that Weba Chute Systems & Solutions can achieve in the design and implementation of projects.

The precision and portability of modern laser scanners have made them invaluable in designing, building and extending

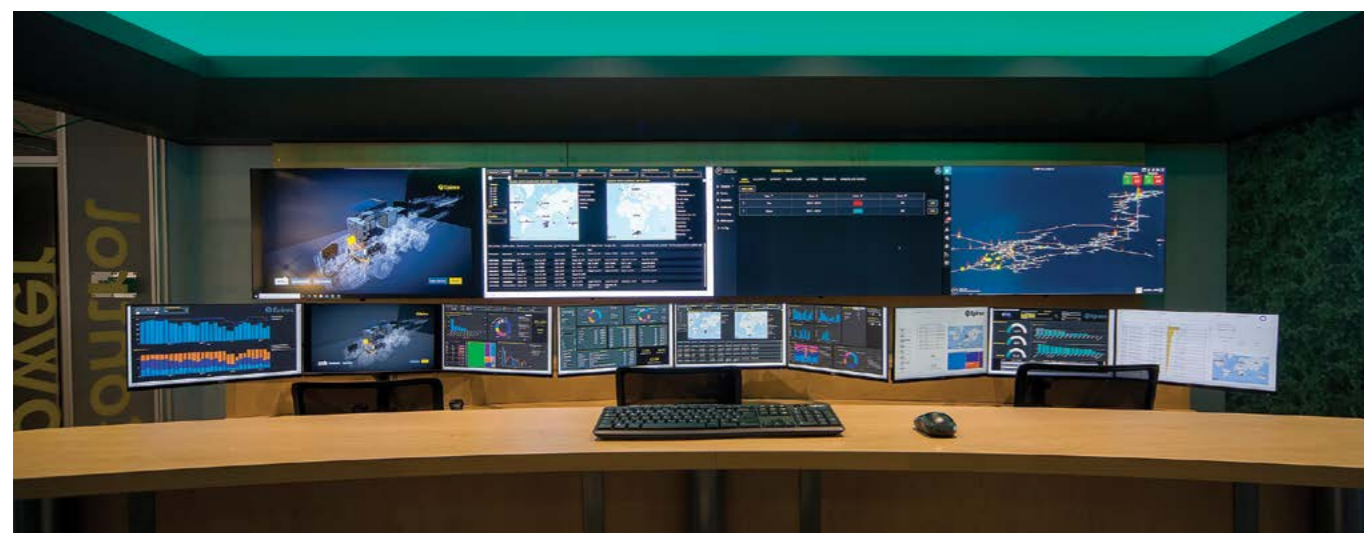
technical facilities.

“Our decades of experience in the mining environment give us the capacity to fully leverage the value of 3D scanning to the benefit of our customers,” he says. “This means accurate costing and seamless project roll-out – on time and on budget.”

This is increasingly important as mines drive productivity and prioritise uptime, with many retrofit or maintenance projects required to be conducted during the strict shutdown periods on mines.

“Our engineering know-how is central to integrating 3D scanning into our design and manufacturing processes, improving our planning and scheduling through more precise data,” says Nienaber. “We translate this capacity into reduced project risk and lower contingency costs – allowing us to work efficiently at a low margin of error even under the time constraints in these projects,” he concludes.

[www.webachutes.com](http://www.webachutes.com)



From its Control Tower and with customer permission, Epiroc has access to near-real time data of customers' smart machines operating anywhere in the world.