

## JSC AK Altynalmas

JSC AK Altynalmas: Digital Mine and mobile technology as the future of the mining sector

JSC AK Altynalmas is one of the leading gold producers in the Republic of Kazakhstan, a full geological, mining and gold-processing company.

The company takes care of its employees not only in the area of industrial safety, striving for zero injuries, but also creates a high-tech environment and introduces modern tools to increase the comfort of the mining workers at all stages of production process.

While individual companies are implementing initial digitalization programs, used to address individual industry challenges, JSC Altynalmas launched its own "Digital Mine" project in 2017.





"Digital Mine" is a breakthrough in improving productivity through automation and digitalization of business processes. The project includes the implementation of digital technologies and elements of Industry 4.0 and is important both across the mining and metallurgical industry and across the state.

The "Digital Mine" program includes the implementation of more than 20 projects within 3 years. Currently, under the leadership of Zhanar Amanzholova, the project has achieved significant success; is developing dynamically and has already been recognized with a number of

## **Digital Mine**

Since 2017, JSC AK Altynalmas has been focusing on its own digital mine project.

With the aim of improving efficiency, productivity and security, JSC AK Altynalmas's IT team has been developing its own in site Wi-Fi network infrastructure. The Wi-Fi network has been deployed across the sites of Akbakay and Pustynnoe in Kazakhstan as its initial test, for the benefit of markshaders and geologists that were able to register and transmit information on the go, improving overall efficiency.

## Real time information.

Experience has highlighted the fact that small issues along the production line gradually become widespread.

For this reason, real time information provided to the monitoring and management center was going to be the key to improving processes.

After conducting some internal analysis of the processes, the need of a tool was highlighted to be able to perform tasks, detect delays, irregularities and flows during each shift, analyzing the situation at short

## RugGear and RG910

Because the devices were requested to work underground where standard devices were prone to failure due to the harsh conditions (high levels of humidity, exposure to dirt and water), in March 2020 the Altynalmas

An analysis of the requirements showed that the RugGear RG910 was the best candidate for the job. Designed to operate in harsh industrial environments, thanks to its IP68 and MilStd810G certification, the data

"Due to its reliability, security and functionality, industrial tablets justify their value in the near term," said Konarov Bakytzhan Zheksenbayevich, chief business consultant in the business process development and



## **Improved efficiency**

"The function of the devices was to optimise the work of production and mobile personnel, allowing an increased exchange of information between the participating processes, to allow better control along the production line, as well as a faster reaction to any emerging problem.

""Everything that happens on the company's sites will be seen directly on mobile devices. What do we expect? Decisions will be made faster. And these are not intuitive, but balanced, reasoned decisions based on complete, reliable information"" – commented Zhanar Amanzholova, project manager of the ""Digital Mine"" and Vice-President of IT and Corporate Development of JSC AK Altynalmas.

Thanks to its practical one hand strap, the RG910 could be easily carried around by personnel and the constant connection to the surface allowed the specialist to control processes without having to go back to the operation centre to receive instructions.

The ability to share pictures to the relevant teams allowed for better and faster reaction, with repairs processed straight away or with specialist personnel descending into the mine with all equipment required to fix the issues.

The use of tablets to work with digital data instead of paper documents made it easier to organize workflows and allowed changes to be made easier than before.

No matter where the employees are: in the office, underground or on the go – mobile devices allowed them to perform everyday tasks efficiently as never before."

## **Security first**

Thanks to its dedicated SOS button, the RG910 is ideal for workers that carry out their work alone. The control centre will always be able to locate its workers and the worker in trouble only needs to press one button to

## **Right device and solution to fit**

If you, like Altynalmas, want to improve efficiency and are looking for the right partner, get in touch. Together we'll find the right device to fit your needs.

Get in touch