Enaex

Public information

REDUCE HUMAN EXPOSURE & IMPROVE PRODUCTIVITY

With the UG-iTruck®

SITUATION

Tunnel development for deep/high stress mining

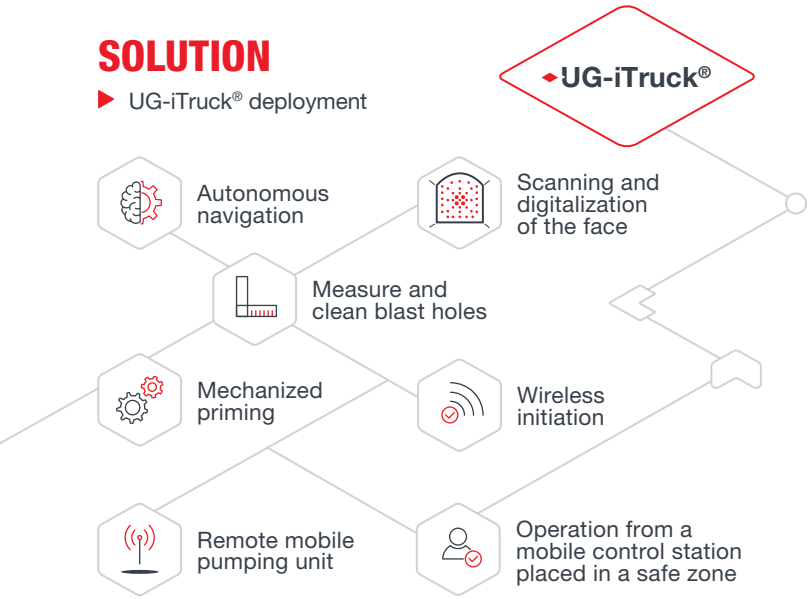
▶ El Teniente is the world's largest underground copper mine, situated at 109 km from Santiago in Rancagua, Chile. The mine is currently in the process of intensifying operations to prolong its lifespan. Deep underground mining operations are accompanied by high stresses and seismic activity, creating exposure to these risks for workers.

CHALLENGE

▶ Move people from the tunnel face to a safe zone, inside or outside the mine, where they can operate remotely.

SOLUTION

▶ UG-iTruck® deployment



RESULTS

80% reduction in person-hours exposed to risk

▶ We performed the 1rst 100% remote blasting in productive mining in history. We reduced more than 80% of person-hours exposed to risks. Thanks to the UG-iTruck®, our client Codelco can make it possible to extract new copper resources in deep mining.

Client:	CODELCO
Solution:	UG-iTruck®
Location:	El Teniente Mine, Chile
Application:	Underground & Tunnel

Authors: Milton Cabezas, Remote Operations Chief

Javier Maturana, El Teniente Plant Administrator

Rodrigo Miranda, Senior Project Manager

Miguel Vargas, Senior Director of Construction and Assembly

KEY FEATURES

2,546 ▶ Person-hours without risk exposure per UG-iTruck® per year

▶ 1 Operator at the control station

100% ▶ Remote blasting in underground mining

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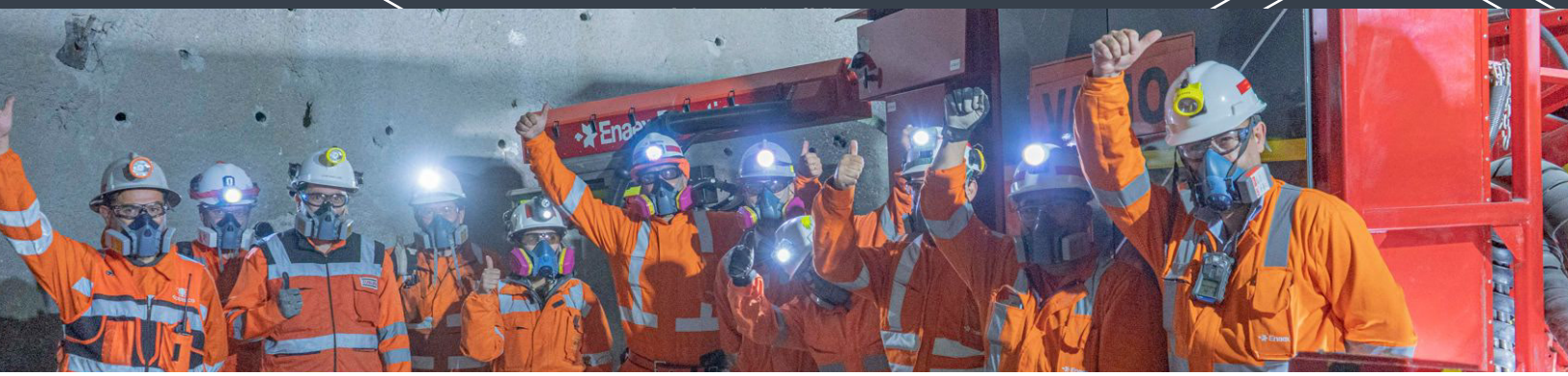

STRONGER BONDS

▶ In order to make remote loading of explosives in underground mining a reality, we have been working very closely with Codelco DET for several years. By striving for stronger bonds with them, we have achieved a close relationship to the extent that CODELCO is our preferred customer to implement this type of disruptive innovation, as they have understood the complexity of the development we are jointly undertaking.

TESTIMONIALS

"Outstanding teamwork, we've made history in underground mining, and are spearheading the industry with Codelco. A breakthrough for deep underground mining."

Miguel Vargas Valenzuela,
Senior Director of Construction at Codelco

"We've had this dream for many years, it's finally come true. It is all about our team. Thanks very much for your efforts Enaex."

Pablo Gandara,
Underground Mine Preparation Manager at Codelco

ABOUT US

At Enaex, our purpose is to humanize mining, generating a positive impact in all aspects of the rock fragmentation process. We understand that life is the planet's most precious asset. That's why we prioritize people, ensuring the well-being of our teams, the communities where we operate, and the environment.

With a proven track record, Enaex designs and implements personalized and collaborative fragmentation solutions that deliver exceptional value to customers on a global scale.

- ▶ More than 100 years of experience.
- ▶ Rock fragmentation services on six continents.
- ▶ Over 400 Mobile Manufacturing Units (MMUs).
- ▶ Pioneered the first 100% remotely controlled open-pit blast.
- ▶ Annual production of 880,000 tons of ammonium nitrate.
- ▶ First fully autonomous underground blast.
- ▶ More than 7,000 employees.

Do you want to get in touch with one of our experts?
SCAN THE QR CODE OR CLICK HERE

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