



Company News

## **thyssenkrupp to deliver conveyor system for new underground copper mine in Mongolia**

Edited by on 9. Aug. 2017

One of the richest underground copper deposits in the world will soon be accessed with the help of high-capacity gearless driven conveyors from thyssenkrupp. As one of the leading global providers of mining systems, the Industrial Solutions business area has won a contract to supply a material handling system for the new Oyu Tolgoi underground mine in Mongolia. The contract value is in the higher double-digit million euro range. thyssenkrupp will supply a total of nine conveyors with a combined length of 9.5 km as well as seven transfer towers operating at a design tonnage of 7,100 tons per hour. First production from underground is expected in 2020. The Oyu Tolgoi mine complex is a joint venture between the Government of Mongolia and Turquoise Hill Resources, which is majority-owned by Rio Tinto.

From a depth of nearly 1,400 m beneath the Gobi Desert in the south of Mongolia, the new underground material handling system is planned to transport 95,000 tons per day of copper ore up to the surface. The main components are four high lift conveyors each equipped with 1.6 m wide steel cord belts and dual 5,500 kW gearless drives from **Siemens**. Further conveyors will feed the main incline conveyors and tie the new underground system into the existing process facility.



Torsten Gerlach, CEO of the business unit Mining Technologies of thyssenkrupp Industrial Solutions

**Torsten Gerlach**, CEO of the Mining Technologies business unit of [\*\*thyssenkrupp Industrial Solutions\*\*](#): *“This order again proves that thyssenkrupp is a strong player in the mining and materials handling industry. We are proud to contribute to this project with our intelligent belt conveyor technology and our strong global project execution capabilities. The system will help the Oyu Tolgoi mine set standards in terms of productivity and safety.”*



thyssenkrupp belt conveyor systems are individually planned and constructed to ensure the best possible solution for every material, every climate zone and, every topography. This downhill conveying system installed in Peru transports 4,500 tons of crushed iron ore from mine to the port.

The Oyu Tolgoi mine began producing copper concentrate from an open pit operation in 2013. The future underground construction activities will transform Oyu Tolgoi into one of the most significant copper mines globally.



The Las Bambas overland conveyor system in Peru transports 9,400 tons of copper ore per hour over a distance of more than 5.5 km.

**New conveyor system reduces maintenance and downtime** The order given to [thyssenkrupp](#) includes the engineering, design, and supply of the new material handling system as well as required site support services during the construction and commissioning phases. It will be designed with an emphasis on ease of maintenance. This includes, for example, the ability to quickly replace chute sections as well as idler rolls and belt cleaners. The drive components are massive in terms of size and weight, so great attention will be paid to safely transporting them underground and to ensuring they can be safely exchanged in the future. Overhead bridge cranes are strategically located to not only service

the equipment, but also to aid in the erection of the major structures. The work scope also includes water and air piping for the required dust suppression equipment, fire protection along all of the underground conveyors and electrical infrastructure to control and power the equipment.



The Los Pelambres downhill conveying system which was developed by thyssenkrupp transports copper ore over a total distance of 12.7 km through a tunnel system.



3D rendering of the Oyu Tolgoi underground drive chamber for one of the four slope conveyors with 2 x 5.5 MW gearless drives.

**About us:** The Industrial Solutions business area at [thyssenkrupp](https://www.thyssenkrupp.com) is a leading partner for the engineering, construction and service of industrial plants and systems. Based on more than 200 years of experience we supply tailored, turnkey plants and components for customers in the chemical, fertilizer, cement, mining

and steel industries. As a system partner to the automotive, aerospace and naval sectors we develop highly specialized solutions to meet the individual requirements of our customers. More than 21,000 employees at over 70 locations form a global network with a technology portfolio that guarantees maximum productivity and cost-efficiency. The Mining Technologies business unit supplies a full range of machinery, systems, equipment and services for the extraction, processing, storage and transportation of raw materials. In collaboration with our customers in the mining and minerals sectors throughout the world we develop custom, forward-looking solutions that enhance productivity and allow natural resources to be used responsibly and efficiently.