



Company News

TAKRAF and ABB renew Partnership for Gearless Conveyor Drive Deployment

Edited by on 18. Mar. 2024

Leipzig, Germany –

TAKRAF and ABB, a global technology leader in electrification and automation, recently renewed their ongoing strategic partnership regarding the deployment of Gearless Conveyor Drive (GCD) technology on TAKRAF bulk material handling solutions enabling a more sustainable and resource-efficient future.



From left to right: Ulf Richter (ABB Product Manager Mining Conveyor Systems), Frank Kschamer (ABB Head of Sales Mining Germany), Thomas Jabs (TAKRAF Group CEO), Frank Enderstein (TAKRAF Group Head of Sales & Marketing), Daniel Greune (TAKRAF Group Vice President Systems)

In an important development for the global mining industry and as a commitment to both groups' efforts in achieving a more sustainable and resource efficient

future, TAKRAF Group and ABB, renewed their ongoing strategic partnership, dating back to 2011, regarding the deployment of GCD technology.

Gearless drives eliminate the need for a gearbox, hereby significantly reducing the number of main wear parts, which results in increased efficiency and reliability, as well as less maintenance being required. Further advantages include a considerable reduction in the drive system's footprint and emissions. In fact, for a large copper mine in Chile, studies showed that CO₂ emissions were reduced by 66% as compared to diesel truck engines for the same copper production volume.

In 2019, TAKRAF delivered equipment for the principal ore transport system for Chuquicamata, one of the world's largest copper ore mines, moving ore extracted underground to an above-ground processing plant using GCD technology (11 x 5 MW gearless synchronous motors). This incredible system, boasting a total installed drive power of 58 MW, transports crushed copper ore from underground storage bins to the surface along a 7 km underground tunnel that overcomes 1 km of vertical elevation. Once on the surface, the ore then travels along an overland conveyor that transports it the final 6 km to the distribution silo.

Thomas Jabs, TAKRAF Group CEO, had this to say recently at the strategic partnership event, "We are proud of our ongoing partnership and association with our drive technology partner, ABB. This is a relationship that dates back more than 12 years and has resulted in some incredible technology achievements, not to mention delivery of the world's most powerful belt conveying system at Chuquicamata using GCD technology. GCD's bring numerous benefits, which are important to us as a company and the complete solution offering we present to our clients. With decreasing ore grades, ever-deeper mines and a general tendency to move from an open pit operation to underground, powerful, efficient and small footprint conveyor drives will only become ever-more important in an industry in which safety and sustainability are also increasingly important. We look forward to this new chapter and, together with ABB, look forward to future GCD installations."