

# CUAJONE, Peru

One of the strongest conveyor belts worldwide



## Discover how Sempertrans delivered Unmatched Conveyor Belting Solutions for Thyssenkrupp's Copper Mine Project in Peru, Setting a New Industry Benchmark.

Thyssenkrupp Industrial Solutions has been working together with Sempertrans since 2012, trusting Sempertrans to support them in facing the challenges of the mining industry with innovative and reliable solutions. In recent years, due to increasingly complex requirements in mining, there has been an upturn in the use of conveyor belts with high capacities and high performance.

To respond to the critical nature of these tailored solutions, thyssenkrupp and Sempertrans have worked closely together in order to offer the most efficient and productive conveyor systems to customers. Over the last few years both companies have successfully implemented several projects in South America, including the Cuajone mine (Southern Copper Corp.)

### PROJECT IN NUMBERS

Transported material	Copper
Conveyor length	6.514 km between pulley centers
Conveyor belt length	Approx. 13.156 km
Conveyor belt width	1,829 mm
Conveyor belt tensile strength	6,800 N/mm
Transport capacity (Design)	8,800 t/h
Belt speed	6.2 m/s
Driving power	12,000 kW

### SUMMARY

#### PROJECT

Client: thyssenkrupp  
Type: Copper mine  
Location: Cuajone (Southern Copper Corp.), Peru  
Installation: May, 2018

#### RESULTS

- Reliable transport at the highest capacity
- Longer service life
- Lower safety risks
- Reduced capital investments and operating costs

### About CUAJONE: Open-pit Copper Mine

- A significant mining project undertaken in Peru
- Located in the district of Torata, province of Mariscal Nieto, department of Moquegua, Peru
- It is located at an approximate height of 3500 (meters above sea level)
- One of the main copper-producing mines in the country. Extends across 35,000 hectares
- Mine Life is more than 50 years
- Commodities are copper, molybdenum and silver

## CUSTOMER CHALLENGES

- Transport large volumes of copper ore across extended lengths of ground.
- Sustain the operational pace of the high capacity mine.
- Ensure durable and sustainable operations.
- Reduce operating costs.
- Provide added value for the end user via customized solutions.



## SEMPERTRANS SOLUTIONS

- Design and supply of 13.156 km of Sempercord heavy steel cord belts
- Special technical application engineering consultancy for OEMs by Sempertrans' Global Application Engineering team
- State-of-the-art splicing technology
- 24/7 on-site splicing supervision over several weeks by Sempertrans' Field Service technicians
- After-sales support to ensure smooth operations and customer satisfaction

To make sure thyssenkrupp's conveyor systems have the longest service life possible in order to support the Cuajone long-term project, Sempertrans supplied around 13.156 kilometres of steel cord belts with a tensile strength of 6800 N/mm. These high strength steel cord conveyor belts ensure reliable transport at the highest capacities and supply ultimate service life and utilisation. They are the perfect choice in the case of Cuajone's heavy duty mining application, where steady performance and durability are key.

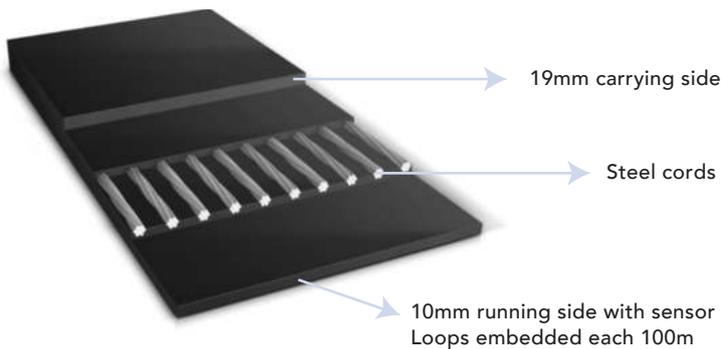
For this project Sempertrans also delivered ST1250 and ST2000 conveyor belts, as well as adapted splicing kits. The splicing process was completed in 2017 under Sempertrans supervision, guaranteeing top quality splices and splice longevity. In total 44 Splices were supervised. After-sales customer support has been another value-add service our customer benefitted from. After the conveyor belts were installed Sempertrans has sent Application Engineer on-site to provide expert appraisal and advice on optimum conditions for longlasting conveying operations thanks to our conveyor belts.

## SEMPERCORD™

Sempercord high strength steel cord conveyor belts are a combination of ultimate carcass breaking strength and lowest elongation. They are made with high-tech rubber compounds and in-house produced steel cords, thus ensuring complete control over the product quality. Widely used in heavy duty mining applications, as well as industrial environments where reliable performance and availability are key, Sempercord belts comply with all major international standards as much as they can be specified for meeting individually exceeding requirements of high end users.



## Sempercord 1829 ST 6800 19+10L100 X



### When to use Sempercord?

- Heavy duty conditions
- Highest transport capacities
- Long center distances
- High nominal belt strength requirements
- High splicing efficiency
- Energy Saving Requirements in combination with TransEvo covers
- Heavy impact and abrasive materials

## ABOUT THYSSENKRUPP

The Industrial Solutions business sector at thyssenkrupp is a reputable partner for designing, constructing, and maintaining industrial systems and plants. With over 200 years of expertise, we offer customized, comprehensive plants and components to customers in the mining, cement, steel, chemical, and fertilizer industries. As a system partner for the automotive, aerospace, and naval sectors, we develop highly specific solutions to cater to our customers' individual needs. Our global network consists of approximately 19,000 employees located at over 70 locations worldwide, offering a technology portfolio that ensures optimum productivity and cost-effectiveness.

## ABOUT SEMPERTRANS

Sempertrans, part of the Semperit Group, is a leading global manufacturer of conveyor belts known for their high performance, operational reliability, and long service life. Our state-of-the-art production facilities in Poland and India allow us to deliver innovative and sustainable solutions to a wide range of industries, including mining, heavy industry, and shipping ports. Our product portfolio features both textile and steel cord conveyor belts, including specialised covers and engineered solutions tailored to specific customer needs. We provide a comprehensive range of services, from application engineering and product development to installation and maintenance, to ensure optimal business operations for our customers. Trust Sempertrans for the most suitable and reliable conveyor belt solutions that drive your business forward.



## CONTACT US

[www.sempertrans.com/contact](http://www.sempertrans.com/contact)

E-mail: [sempertrans@semperitgroup.com](mailto:sempertrans@semperitgroup.com)

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

**sempertrans**<sup>®</sup>   
A MEMBER OF THE SEMPERIT-GROUP