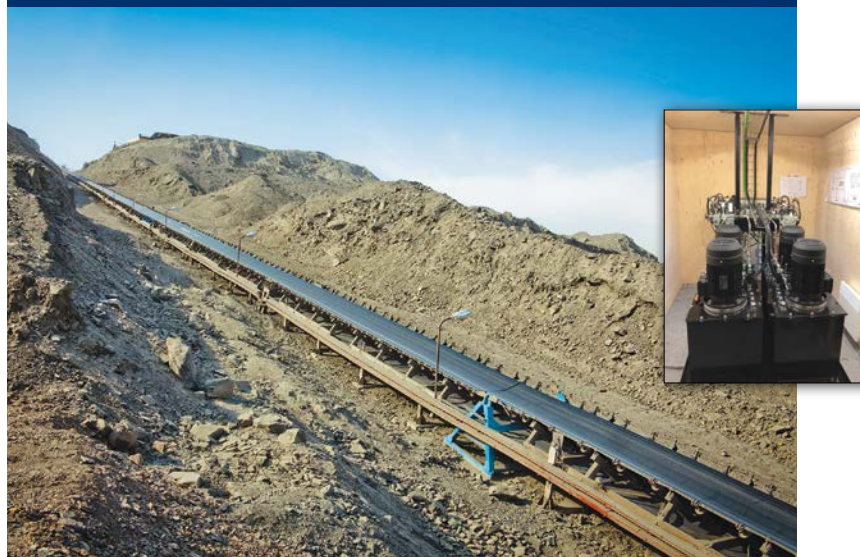




HIGHLIGHTS

- BSFK Series monospring brakes
- Unique soft braking controls (SOBO iQ)
- Containerized custom hydraulic power units manufactured in-house
- Heated and insulated oil lines
- Brake discs
- Disc temperature sensors
- Brake pad worn/fully worn sensors
- Spring monitor tests spring package clamping force
- If one part of the braking system fails, the others can take over and safely stop the conveyor

Application Success Story



BSFK 527 Braking System with SOBO® iQ

World's Highest Downhill Mine Conveyors

PROBLEM

Complete braking systems were required for use on a pair of downhill conveyors installed at the largest copper mine in China. At a height of 5,200 masl (3.2 miles above sea level) and lengths of 3,000 and 6,000 meters respectively, the conveyors are the largest downhill conveyors operating at that height in the world. The conveyors transport crushed copper ore from the mine pit down the side of the mountain at a capacity of 10,000 tons/hour. The braking systems are needed to provide emergency braking in case the conveyor's variable frequency drive (VFD) fails.

SOLUTION

Based on previous successful collaborations, the conveyor OEM contacted Svendborg Brakes early in the project development phase. The application required an extremely fast-acting braking system due to the conveyors' steep downhill angle. If the VFD fails, the conveyors' speed can increase 50% in only 1 sec.

The Svendborg Brakes engineering team designed a custom braking system to meet the challenging conveyor application requirements. Each braking system consists of pedestal-mounted, spring-applied, hydraulically released BSFK 527 caliper disc brakes, a SOBO iQ controls, a hydraulic power unit and a disc. A complete braking system is installed at the tail section on each of the two driven pulleys on both conveyors.

Svendborg performed a reaction time test, witnessed by the OEM and end user, where the brakes were cooled down to -30°C to simulate the extremely cold temperature at the mine's high altitude. The SOBO iQ controls and hydraulic power units are housed in specially-designed insulated containers. Piping from the containers to the brakes was also insulated and heated to keep the hydraulic oil thin, assuring fast reaction time in the harsh, cold conditions.

Svendborg Brakes GLOBAL REPRESENTATIONS www.svendborg-brakes.com

DENMARK	sb@svendborg-brakes.com	+45 63 255 255	AUSTRALIA	sales@altramotion.com.au	+61 (0) 8 94 160300
GERMANY	sb@svendborg-brakes.com	+49 5422 9272 000	KOREA	jong.lee@svendborg-brakes.com	+82 10 9703 0979
CHINA	sb@svendborg-brakes.com	+86 21 60580600	SOUTH AFRICA	sales@sintech.co.za	+27 83 382 2479
USA	na@svendborg-brakes.com	+1 (303) 285 1271	CHILE	sa@svendborg-brakes.com	+56 23 203 9150
BRAZIL	altra.vendas@altramotion.com	+55 11 4615 6300	SPAIN	sb@svendborg-brakes.com	+34 (975) 2336 55
INDIA	milind.sule@altramotion.com	+91 83909 97970	CZECH REP.	jan.mikyska@svendborg-brakes.cz	+420 2 51 68 01 68
POLAND	biuro@vitech.pl	+48 605 765 904	PERU	pe@svendborg-brakes.com	+51 959 224488