

## Application Success Story



### HIGHLIGHTS

- BSFI 320 dual-spring hydraulically-released caliper disc brakes
- Unique soft braking control (SOBO iQ)
- Hydraulic power units manufactured in-house

## BSFI 320 Braking System with SOBO® iQ Coal Mine Conveyor

### PROBLEM

A braking system was required for use on an overland conveyor at a large coal mine in Tusimice, Czech Republic. The 1800 mm (72 in.) belt conveyor is 900 m (2,952 ft.) long and powered by 3 x 500 kW drives. The opencast coal mine conveyor transports overburden at a rate of 3,000 mt/h with a belt speed of 4.5 m/s.

### SOLUTION

Svendborg Brakes supplied a complete braking system consisting of BSFI 320 dual-spring caliper disc brakes, a SOBO® iQ controller and SOBO iQ hydraulic power units. The system provides emergency stopping and parking functionality.

The spring-applied, hydraulically-released BSFI 320 brakes act on a 0.8 m (31.5 in.) diameter disc mounted on the high-speed side of the drive. Braking time is fully programmable and, in case of power failure, can reach up to 50 seconds.

SOBO iQ, the next generation of Svendborg's industry-leading SOBO (Soft Braking Option) braking controller combines various cutting-edge technologies to provide significant flexibility, safety and durability on mine conveyors. The controller features three-state digital modulation and a revolutionary dual-loop PI control (pressure/speed). The pressure control is based not only on speed but also on deceleration. Advanced functions including independent overspeed monitoring, rollback, gearbox and out-of-band monitoring are included.

Manufactured in-house, Svendborg's specialized hydraulic power units are engineered to perform in tough mining applications. The units are equipped to monitor oil level and temperature, motor and pump function, and operational pressure.

### Svendborg Brakes GLOBAL REPRESENTATIONS [www.svendborg-brakes.com](http://www.svendborg-brakes.com)

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