INNOVATION

SPOTLIGHT from the brands of Regal Rexnord

COMPLETE BRAKE PACKAGES AND BACKSTOPS FROM REGAL REXNORD PROVIDE ENHANCED SAFETY ON MINE CONVEYORS

Large belt conveyors are often utilized to transport heavy, bulky ores such as iron, copper, gold, uranium, molybdenum, etc., as well as coal at mines around the world. The conveyors run uphill, downhill and cross-country depending on mine terrain and location. They transport material from underground or open pit mines, to processing plants, storage areas, ports, etc.

Conveyors pose several hazards to the safety of the equipment, particularly on long inclined and declined conveyors, where the operation is mostly unmanned due to its distance, terrain and profile.

With an increase in tonnages and declining conveyors with several hundred meters of drop, it is imperative to install an intelligent soft braking system to address the starting and stopping requirements under various load conditions.

An anti-runback device, a backstops or holdback, is required on all inclined mining conveyors to prevent reverse movement of the belts.

REGAL REXNORD BRANDS PROVIDE PROVEN SOLUTIONS

Since 1989, Svendborg Brakes has been providing industry-leading hydraulic brakes, hydraulic power units and soft braking controls to meet the demands of the mining industry. Marland Clutch and Formsprag Clutch backstopping clutches have been installed at mines around the world since the 1930's.

www.altramining.com

FORMSPRAG CLUTCH™
A REGAL REXNORD BRAND

MARLAND CLUTCH™
A REGAL REXNORD BRAND

SVENDBORG BRAKES™
A REGAL REXNORD BRAND

INNOVATION

SPOTLIGHT from the brands of Regal Rexnord

TURNKEY PACKAGED HYDRAULIC BRAKE SYSTEMS PROVIDE VALUE

Svendborg offers a wide range of spring-applied, hydraulically-released caliper brakes for use on mining conveyor applications. Conveyor OEMs and mine customers have come to rely on Svendborg's extensive mine conveyor application expertise.

While competitors simply provide brakes, Svendborg has the in-house capabilities to offer brakes as well as all the related system support components including a unique soft braking control and hydraulic power units that ensure fast controlled and safe braking.

A complete Svendborg engineered brake system package, installed on a copper mine conveyor, consists of two BSFH 520 caliper brakes (red) and disc, a hydraulic power unit and a soft braking control (housed in two adjacent gray boxes on right).

THE HEART OF THE SYSTEM: SOFT BRAKING CONTROL

Svendborg's unique soft braking control (SOBO®) provides a range of safety and durability benefits in heavy industrial applications including mining. Deceleration and the stopping of heavy conveyor loads is critical, and controlled braking is essential for a significant reduction of torque peaks, preventing damage to the belt and mechanical components.

The soft braking control benefits and features include:

- Controlled braking independent of load and load position
- Braking on time or distance
- Adjustable brake ramp/curves
- Compensating for variable friction factors
- Controlled start-up
- Real time monitoring of brake sequence time.

HYDRAULIC POWER UNITS

Manufactured in-house, Svendborg's broad range of standard and specialized hydraulic power units is engineered to meet any mining requirement. In order to minimize downtime, the units are equipped to monitor oil level and temperature, motor and pump function, and system pressure to immediately identify any failure and thereby prevent further damage. Svendborg hydraulic power unit features include:

- Fast braking and retraction time
- Hand pump for manual brake release in case of power failure
- Brake on/off indication
- Operational in cold climatic conditions – as low as -40°C/-40°F.

STRONG, RELIABLE REGAL REXNORD BACKSTOPS ARE DESIGNED FOR TOUGH MINING APPLICATIONS

Mining conveyor backstops prevent massive loads from unsafely racing backwards in the event of a power outage or mechanical failure.

Robust Marland and Formsprag overrunning clutch type backstops are designed for precision operation, automatically engaging to transmit torque when relative motion is in the driving direction and freewheels when relative rotation is in the opposite direction. This design provides a wider operating speed range than other types of backstops and much greater torque ranges - in excess of 2,847,000 Nm (2.1 million lb.ft.).

A Marland backstop installed on a large inclined mine conveyor prevents reverse rotation of the belt.

Marland and Formsprag offer a complete backstop rebuild program. All internal components – sprags, energized springs, retainers, bearings, seals and hardware – are refurbished or replaced to new performance standards, with inner and outer races ground to exacting specifications and as a result, the rebuild clutches have a new clutch warranty.

US (Application Assistance)
1-716-298-4100
altraheavyduty.com

P-7759-C 2/18