



## Innovative Custom Solutions



## STIEBER IS MORE THAN OVERRUNNING CLUTCHES & BACKSTOPS

While Stieber offers a strong portfolio of quality off-the-shelf overrunning clutches and backstops, the Stieber engineering team also has a long history of developing innovative, custom solutions to meet specific customer application challenges.

Stieber is recognized as a market leader in the field of overrunning clutches and backstops. Our exceptional technical engineering capability has led to many industry milestones, including the development and design of the largest backstop in the world along with other innovative backstop solutions that are currently providing exceptional performance in a variety of harsh application environments around the world.

# OUR INNOVATIVE TEAM CREATES CUSTOM PRODUCT SOLUTIONS TO PRECISELY MATCH CUSTOMER REQUIREMENTS

Stieber's extensive application knowledge along with the integration of advanced technologies are routinely utilized in the design and manufacture of thousands of customer-specific solutions. The ability to provide the highest level of customization allows users to achieve optimal performance and extended life on their equipment.



## WHY DO CUSTOMERS CHOOSE STIEBER OVER ANY OTHER BRAND?



**Problem:** Most accidents on mining conveyors are caused by the stored energy in the belt. If not properly protected, a loss of power at a mine can allow loaded inclined conveyors to reverse direction, causing damage to expensive equipment. Reverse rotation of conveyor belts can be prevented by installing a standard backstop or a torque-limiting backstop. However, to allow the crew a safe maintenance routine, a loaded conveyor belt needs to be slowly rotated backwards to clear the belt.

**Solution:** Stieber introduced a new series of torque limiting/load sharing backstops with release functionality. The release function allows the tension of a jammed belt to be carefully released using a simple hydraulic pump to actuate the internal hydraulic cylinder. The backstops are capable of performing as many reverse rotations as may be required (within the limits of energy dissipation) to completely unload the conveyor prior to maintenance work being carried out, significantly reducing downtime.

## STIEBER HAS PROVIDED OVER 5,000 CUSTOMER-SPECIFIC SOLUTIONS

## SYSTEM INTEGRATION

## RDBK with SOBO® iQ

Svendborg's SOBO® iQ controller combined with a RDBK releasable backstop allows for controlled roll back.

Additional operating condition information is available.

## CORROSION PROTECTION

#### From Powerplants to Amusement Parks

Customer-specified paint, special protective coatings or stainless steel construction solutions are offered to help withstand the damaging effects of corrosive environments.



## TORQUE LIMITING

### **Gear Protection**

Stieber has developed special torque limiter designs that provide exceptional equipment protection.

The RDBK Series combines a torque limiter with backstop functionalities.

Releasable and lockable devices provide safe and easy maintenance.



## MODIFICATIONS

## **Modified Standard Units**

Sub-assemblies with hubs, pulleys, housings are offered.

Special sealing solutions, shaft connections, bore sizes and lubrication are also available to meet customer needs.

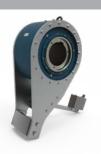


## RETROFIT

### **Technical or Sourcing Issues?**

Enhanced engineered solutions can be provided to solve challenging technical application issues.

Drop-in replacement solutions are readily available for many different competitor models.



## CERTIFICATIONS

#### **Explosive Atmosphere?**

Product and application specific certification according to ATEX Directive 2014/34/EU is available.





**Problem:** A major energy company in Australia needed reliable replacement lowspeed backstops (LSBs) for use on six incline conveyors that move coal out of a mine to an adjacent power station. The existing LSBs were being removed every two years for inspection and often needed to be replaced due to premature failure.

**Solution:** The Stieber engineering team, working closely with the customer, developed a cost-saving, drop-in replacement backstop solution that was able to utilize most parts of the existing torque arm arrangement. The new, extremely reliable backstops will require an initial inspection after a full five years of service... a major cost benefit compared to the two-year inspection schedule needed for the competitor units. The unique Stieber backstop is designed to be easily and cost-effectively overhauled at least four times, yielding an estimated service life of 20-25 years.

#### **Stieber Facilities**

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+66 2322 5527

#### **The Brands of Altra Motion**

#### Couplings

Ameridrives www.ameridrives.com

Bibby Turboflex www.bibbyturboflex.com

Guardian Couplings www.guardiancouplings.com

Huco www.huco.com

Lamiflex Couplings www.lamiflexcouplings.com

Stromag www.stromag.com

TB Wood's www.tbwoods.com

#### Linear Systems

Thomson www.thomsonlinear.com

#### Geared Cam Limit Switches Stromag

www.stromag.com

#### Engineered Bearing Assemblies Kilian

www.kilianbearings.com

## Electric Clutches & Brakes

Matrix www.matrix-international.com

Stromag www.stromag.com Warner Electric www.warnerelectric.com

#### Belted Drives TB Wood's

www.tbwoods.com

#### **Heavy Duty Clutches & Brakes**

Twiflex www.twiflex.com Stromag www.stromag.com

Svendborg Brakes www.svendborg-brakes.com

Wichita Clutch www.wichitaclutch.com

Gearing & Specialty Components Bauer Gear Motor

www.bauergears.com Boston Gear

www.bostongear.com

Delevan www.delevan.com Delroyd Worm Gear

www.delroyd.com Nuttall Gear

www.nuttallgear.com

## Engine Braking Systems

Jacobs Vehicle Systems www.jacobsvehiclesystems.com

#### **Precision Motors & Automation**

Kollmorgen www.kollmorgen.com

#### **Miniature Motors**

Portescap www.portescap.com

#### **Overrunning Clutches**

Formsprag Clutch www.formsprag.com

Marland Clutch www.marland.com

Stieber www.stieberclutch.com

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