

Ameridrives

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Formsprag Clutch

Guardian Couplings

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Lamiflex Couplings

Marland Clutch

Matrix

Nuttall Gear

Stieber Clutch

Stromag

Svendborg Brakes

TB Wood's

Twiflex

Warner Electric

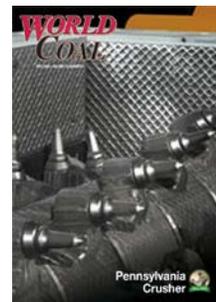
Warner Linear

Wichita Clutch

## Altra Industrial Motion Brands Lead the World in Backstopping Clutches for Coal Operations



As seen in  
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# Altra Industrial Motion Brands Lead the World in Backstopping Clutches for Coal Operations



Two U.S. companies within the Heavy Duty Clutch/Brake Group of Altra Industrial Motion are recognized as global leaders in providing precision overrunning and backstopping clutches to the worldwide coal industry. Formsprag Clutch, Warren, MI, and Marland Clutch, Burr Ridge, IL (along with Altra sister company Stieber Clutch, Heidelberg, Germany), have been designing, manufacturing and delivering dependable, long-life, overrunning and backstopping clutches for many decades.

Within the mining sector, Marland Clutch has designed and supplied some of the world's largest backstops, for protection against reverse torque runaways of inclined, and overland conveyors. Formsprag's LLH-model holdback is likewise one of the most popular devices to prevent uncontrolled rotation in the opposite direction of mining conveyors. Formsprag and Marland backstopping clutches are also used for protection against reverse torque runaways in elevated installations such as vertical mining bucket elevators.

These Altra companies provide the broadest range of overrunning clutches in the world with catalog designs ranging up to 976,271 Nm (720,000 lb.ft.) of torque

capacity and over 2,000 different products. Bore ranges of Marland backstopping clutches reach 600 mm (23.5 in.).

In addition to published catalog models, Marland Clutch has recently designed two massive new backstops rated at 1,273,000 Nm (940,000 lb. ft.), and 1,626,000 Nm (1.2 million lb. ft.), exceeding the largest conventional backstops ever built.

Engineering experience continually expands the group's design features which include: no backlash, sprag and ramp/roller technology, free-action retainers, PCE sprag design, Formchrome® sprags, both inner and outer race centrifugal lift-off designs, three different bi-directional designs and operational cost savings with rebuilding capability designed into many of the clutches.

On the manufacturing side, Formsprag and Stieber have made significant investments to become global leaders in quality. Formsprag quality systems have been certified to ISO-9001 since 1993, and AS 9100 since 2005. Stieber achieved ISO-9001 certification in 1997.

Marland and Formsprag also 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.

In North America, Formsprag is supported by over 60 factory-trained field sales personnel who also support over 1,700 distributor locations worldwide.

Worldwide, Altra operates sales offices in China, Australia, Europe, South America, South Africa and the United States, with sales associates and applications engineers strategically located around the globe in major cities, ports and mining regions.

Formsprag, Marland and Stieber overrunning and backstopping products can be found in coal mining operations in every corner of the world, according to Mike Travis, Formsprag Sales & Marketing – Industrial Products.

"It's hard to visit a mining operation anywhere in the world and not run across at least one Altra Industrial Motion product in use," Travis said. "In addition to the holdbacks and backstops, several of our sister companies within Altra design and manufacture industry-leading coupling products, caliper brakes, heavy-duty pneumatic brakes for draglines and shovels and a myriad of power transmission products."



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