

Continuous condition monitoring in material feed

CONDITION MONITORING

In order to correctly control production processes and maintain flow, information about the condition of the sensors, the process chain and the workpieces is becoming increasingly important. After all, even short-duration unplanned interruptions can have significant effects on performance capability (quantities, quality, etc.).

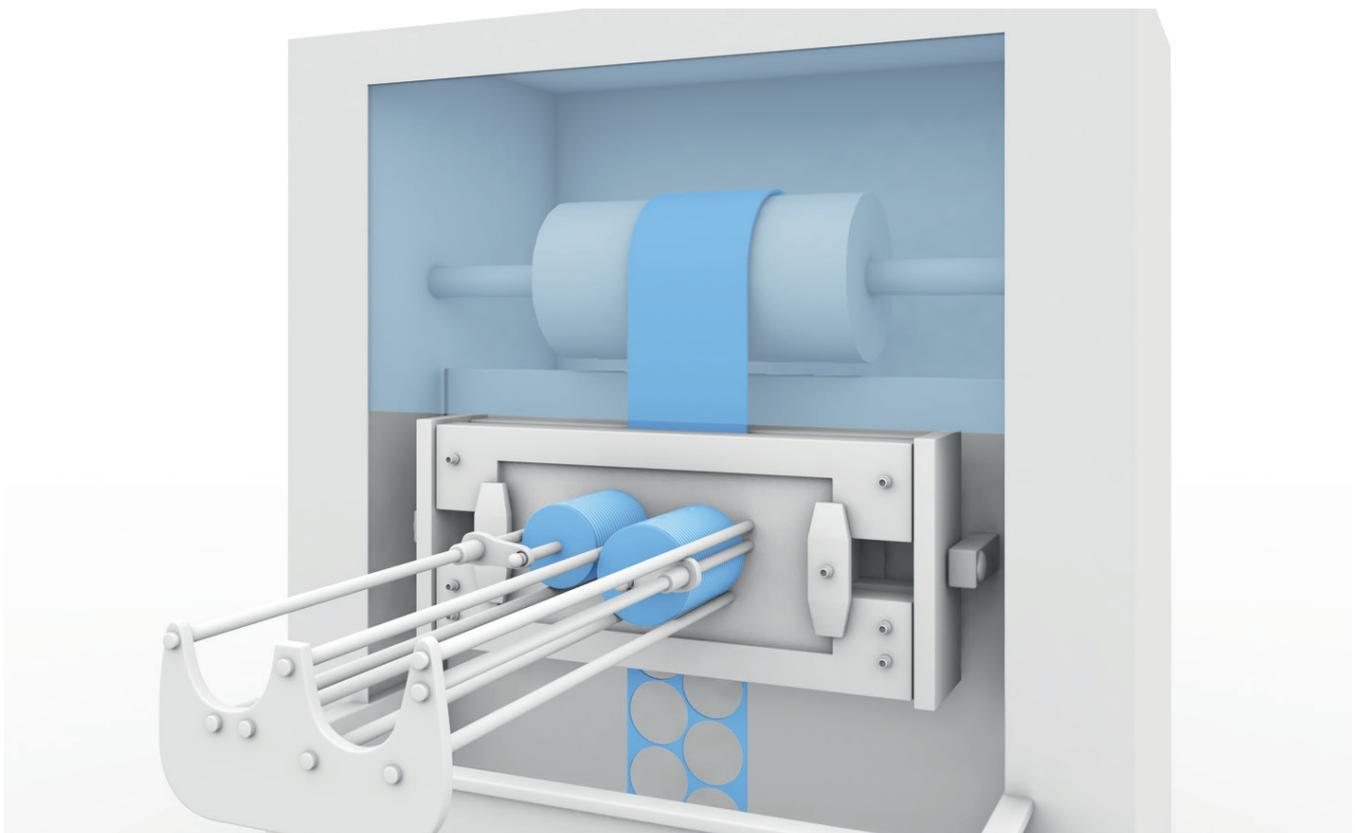
This means that when it comes to material feed, e.g., for punching or pressing, material tolerances and creeping process changes need to be reliably detected. Otherwise in the worst case tool damage can result.

The BML magnetic encoder SL1 offers high absolute positioning accuracy. With the integrated IO-Link interface it enables not only the position information but also diagnostic data, for the measuring section for example, to be transmitted. Even the smallest changes in the measuring section are detected, such as those caused by vibration over the course of time. When values exceed or fall below defined threshold values, it is then possible to take preventive measures, essentially eliminating fixed maintenance intervals.

Reliable power is provided in such systems by a Heartbeat power supply BAE PS-XA-1W-24-025-101 whose load and stress levels as well as life expectancy are indicated by LEDs and optionally via IO-Link. This makes the status evident and capable of being processed via IO-Link in the central diagnostics server. Maintenance can also be performed in a targeted way as needed.

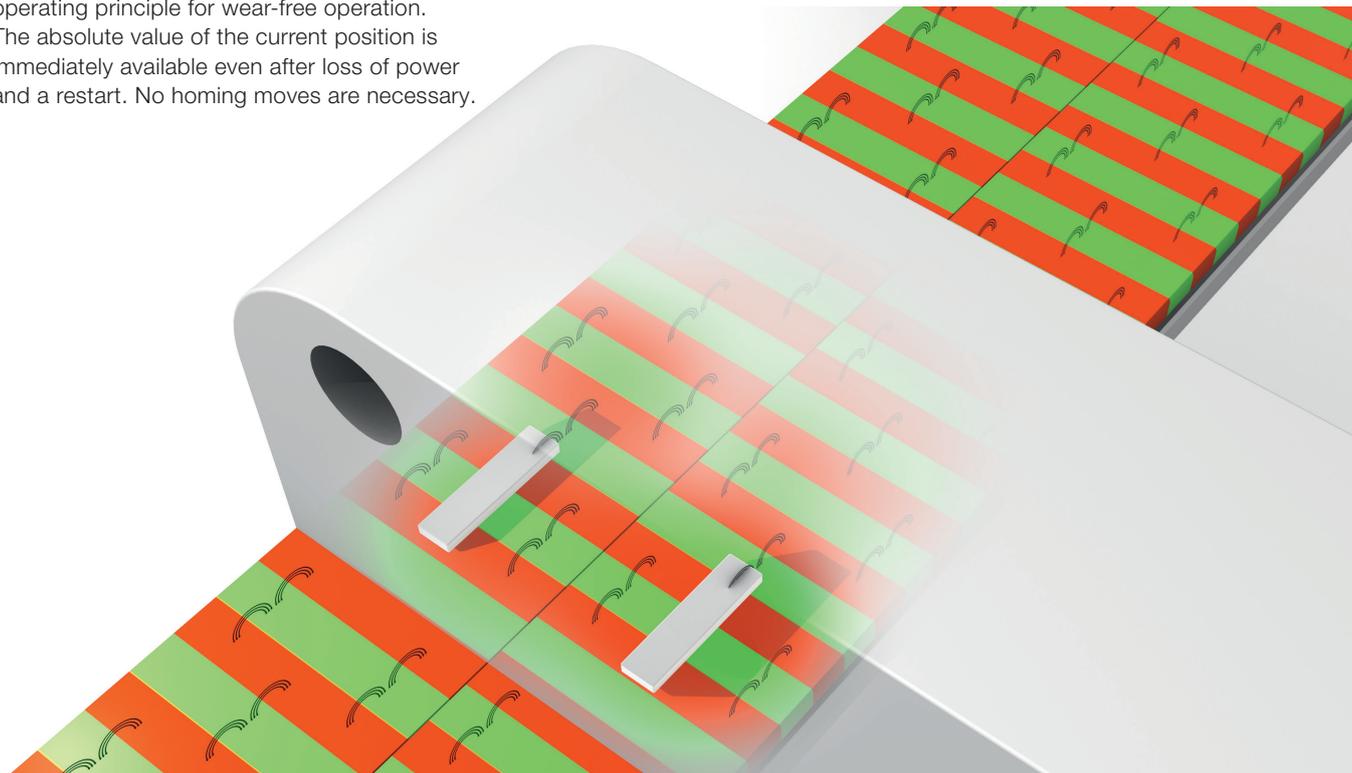
Your advantages

- Easier installation thanks to well-designed and matched system components
- High system up-time thanks to continuous status information – even while the system is running
- Need-based maintenance instead of regular service intervals
- Expanded diagnostics data for maintenance times reduced to a minimum
- Optimized use of devices and a longer service life



Perfect positioning of the material for the follow-on process

Magnetic encoders are highly precise and real-time capable. They use a non-contact operating principle for wear-free operation. The absolute value of the current position is immediately available even after loss of power and a restart. No homing moves are necessary.



Specially developed for controller units, Balluff power supplies can be perfectly integrated into your control package. The integrated Balluff high-performance mounting system makes DIN mounting easier, and terminals with accidental contact protection make additional protection measures unnecessary.



Power supply with Heartbeat function and IO-Link interface



BML SL1 magnetic encoder with IO-Link interface

Suitable Products:



IO-Link-Clip B for Heartbeat power supply



IO-Link connection cable, length 5 m



Magnetic tape on reel, length 24 m



Cover strip for tape on reel, length 24 m