

PressRelease

Tuesday, April 04, 2017

Automation for Food and Packaging

At Interpack 2017, Baumüller will introduce complete solution packages and industry-specific components

High hygiene standards, difficult ambient conditions or extreme demands on machines and systems: Baumüller offers the right drive and automatization solution for every application. From a drive with an aseptic surface for transport tasks in the food sector to compact local drive technology for minimum wiring effort. At Interpack from May 04–10, 2017, Baumüller will present systems, components and services as well as its latest developments in food and packaging in hall 15 at stand E34.

Increased productivity due to the intelligent overall solution

Using the example of a foil bag machine, which is automated by the Baumüller system technology engineering specialists and is equipped with a complete Baumüller system from the control unit to the drive, the automation and drive manufacturer shows how consistent modularization for the user allows quick format changes.

The long-term interdisciplinary engineering expertise paired with in-house hardware and software helps mechanical engineers achieve a universal machine concept with a streamlined drive and control architecture. Machine productivity is increased by the tailor-made complete solution.

Service 4.0: Digitization Increases Availability

An innovation in the field of service is BAUDIS IoT, the predictive maintenance system for IoT retrofitting of existing and new machines. The networked system consists of a broad overview of sensors, a BAUDIS IoT box and streamlined software with smart data algorithms. Data is recorded by local sensors on the drive or also on electrical or mechanical components. For example these record the engine state, such as reporting bearing damage or creating a vibration measurement, in order to detect wear on mechanical components at an early stage. With the Baumüller solution, the recorded data is distributed via the BAUDIS IoT box.

But BAUDIS IoT can do much more than that. The big data analysis used for the servicing can also be used to optimize processes. Since the system provides a warning in cases of need, the monitoring can be used to increase production and optimize the associated load limits of the production systems without causing additional wear. The networking of plants and locations to one evaluation unit also allows for comparisons, which is another added benefit. The long-term collection and evaluation of data allows for the drive specialist to detect and implement optimization potential more effectively. The evaluation always occurs with the latest available algorithms. The system is thus continuously made more intelligent and increases productivity through self-regulating processes in order to avoid production errors and unplanned interruptions.

For the machine manufacturer, BAUDIS IoT is a good way to offer the system as an option and thus to create added value for his customers. Baumüller can completely take over the installation, monitoring and maintenance of the BAUDIS IoT system if desired.

Product Highlights

There are also new arrivals in the areas of drive technology. The b maXX 5800 servo converter can control up to six axes independently from one another. For example, gantry axes can be calculated within one computer unit. This means that this solution does not require field bus communication between the axes and enables extremely fast communication and response times of $62.5~\mu s$. The dead times of field bus communication as well as following errors are omitted and dynamics and accuracy are increased.

The b maXX 2500 decentralized drive, which combines the converters from the b maXX 3300 series with robust DSD, DSC and DSP servomotors, is especially suitable for packaging machines and filling systems with many individual drives. This compact drive with integrated electronics is suitable for a power range up to about 6.5 kW and includes integrated safety technology. Thanks to a variety of supported fieldbus systems and flexibility in terms of its installation location, the b maXX 2500 offers mechanical engineers with a high degree of design freedom and allows for the realization of optimally adapted machine solutions.

A new feature in drive technology is the extremely compact high-torque motor DST2 80, which among other things is used as a drive of starwheel columns for container transport in filling machines in the beverage industry. The direct drive is thermally tightly encapsulated in a stainless steel pipe and impresses with very low self-heating and easy cleaning.

Minimal overall installed size and high system efficiency characterize the gear motor ETAŋ, which was specially developed for the food and beverage industry. The drive is equipped with an aseptic, completely enclosed housing and is therefore particularly suitable for transport tasks in the food sector. Visitors to the booth can also learn about the broad range of Baumüller drive technologies, including disc motors, various servomotor series, linear motors and decentralized drives.

In addition to industry-specific hardware, Baumüller can draw on extensive experience in the packaging and food industry to provide comprehensive expertise and numerous library modules that allow quick and easy programming of individual machine solutions in the in-house engineering framework ProMaster.

Lifecycle management 4.0 worldwide

In addition to developing and manufacturing automation components, Baumüller as a corporate group also covers numerous services for machine and systems construction as well as for machine operators. Starting with the project planning, design and commissioning all the way to maintenance, retrofitting and relocation, Baumüller offers support throughout the entire life cycle of machines and systems.

Mechanical engineers and machine operators at the Hanover Trade Fair will have the opportunity to be consulted by service experts from the Baumüller subsidiaries Nürmont and the Baumüller repair facility on such topics as manufacturer-independent repair, servicing, relocation and installation. With over 40 branches worldwide, Baumüller is a globally reliable service partner with decades of local worldwide experience.

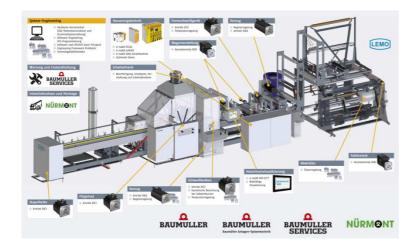


Fig. 1: Using the example of a foil bag machine, Baumüller shows its many years of interdisciplinary engineering expertise. The machine is equipped with a Baumüller complete concept, from the control technology to the drive



Fig. 2: BAUDIS IoT offers an intelligent networking of machines and systems via the Internet, analyzes data and if needed generates a recommendation for action

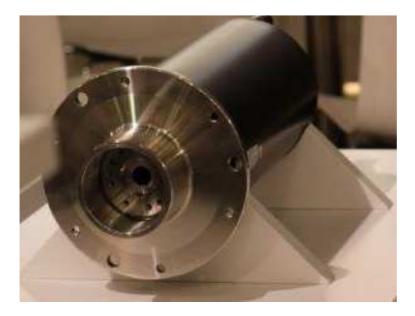


Fig. 3: The extremely compact high-torque motor DST2 80, which among other things is used as a drive of starwheel columns for container transport in filling machines in the beverage industry. The direct drive is thermally tightly encapsulated in a stainless steel pipe and impresses with very low self-heating and easy cleaning



Fig. 4: From a drive with an aseptic surface for transport tasks in the food sector to compact local drive technology for minimum wiring effort. Baumüller will present many industry-specific solutions for food and packaging at Interpack



Fig. 5: High hygiene standards, difficult ambient conditions or extreme demands on machines and systems: the drive and automatization specialist Baumüller always offers the right solution



BAUDIS IoT - The Predictive Maintenance System https://youtu.be/nr4Q7W-nMXw



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Baumüller is one of the leading manufacturers of innovative automation and electric drive systems. At six manufacturing locations and over 40 subsidiaries spread all over the world, 1700 employees plan, develop, produce and install intelligent system solutions for mechanical engineering; from operation and visualization tools to Motion Control software as per PLCopen, from software modules to controllers, also including converters, electric drives and the whole service range for ready to use automation solutions.

The areas service, installations, fitting, and relocation add to the wide range of Baumüller's services. In the mechanical engineering industry, Baumüller is one of the leading partners for automation solutions worldwide.

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