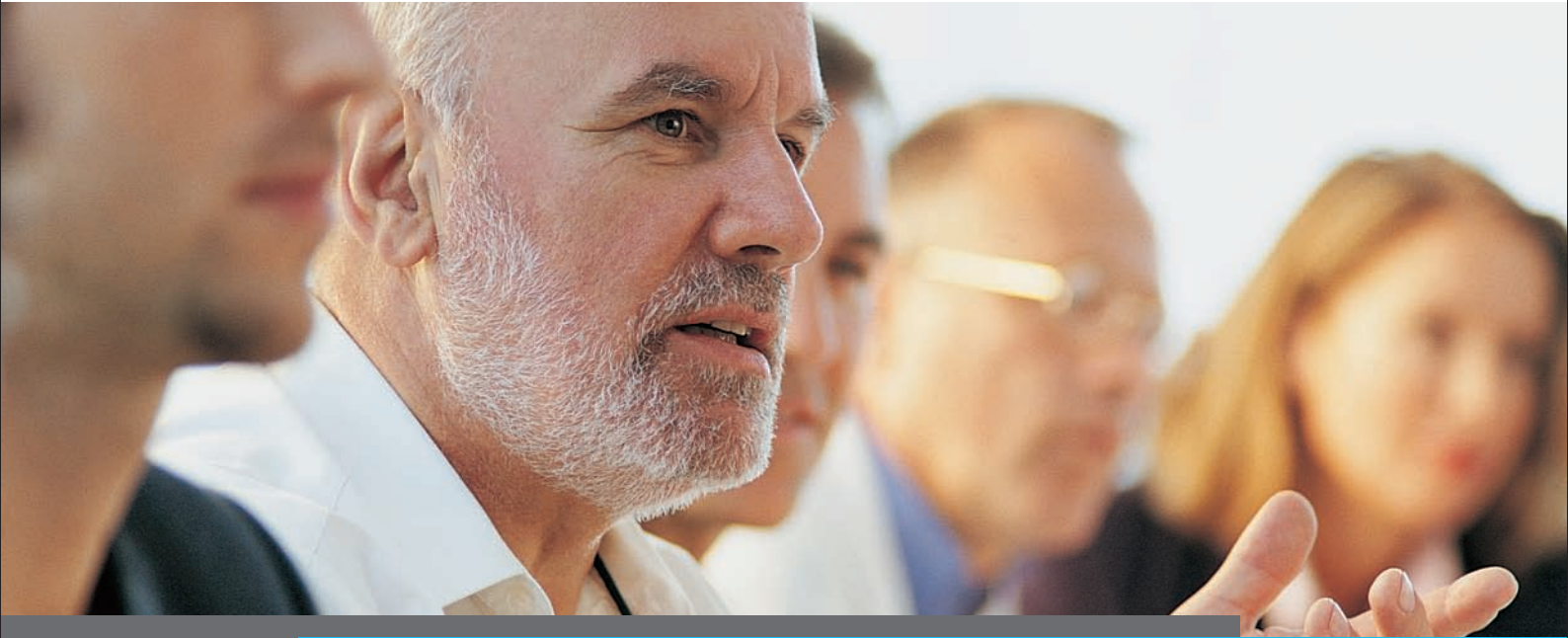


AMK



**“WE WANT A COMPETITIVE EDGE FOR
OUR PACKAGING MACHINES.”**

**HERE COME THE AUTOMATION
SOLUTIONS OF AMK.**

“WE ARE LOOKING FOR A PARTNER WITH A LOT OF EXPERIENCE AND FRESH IDEAS.”



AMK IS MAKING A DIFFERENCE IN MACHINE BUILDING. FOR OVER 50 YEARS – WORLDWIDE.



Austria | Brasil | Bulgaria | China | Czech Republic | Denmark | France | Germany
Italy | Malaysia | Singapore | Spain | Switzerland | Taiwan | Turkey | USA

Welcome to the AMK Group. We have been a pacesetter and idea generator in the area of electrical control and drive technology for more than five decades. More than 900 employees worldwide translate knowledge and vision into pioneering solutions that set new standards over and over again.

These include prominent innovations such as the first infinitely variable AC motor in 1967, the first electronic angle-synchronized operation with variable-speed AC drives in the mid 1970s, and decentralized motor controllers in 2014. Since 1998, AMK has also advanced the electrification of vehicles – through milestones such as the air compressor with tire sealant back in the first year of founding the Automotive division and electronic power steering assist systems since 2010.

As a partner of the machine building industry, we work together with you to develop flexible automation solutions that enable you to meet the challenges of your market even more quickly, easily, and efficiently – whether in the area of packaging, plastics, textiles, or paper processing. With our branch offices and representatives worldwide, we are always close to your needs and desires.

“WE WANT TO BE A LEADER WITH OUR PACKAGING MACHINES.”

AMK MAKES YOU FASTER, MORE FLEXIBLE, AND MORE EFFICIENT.



Your packaging machines must provide maximum performance every day and be set up in optimal time for changing tasks. It is good when you can rely on a partner that makes this easier from the outset.

AMK supports you with reliable and innovative drive and control technology – powerful, available in many variants, and freely combinable. Whether your automation is centralized or decentralized, our scalable all-in-one solutions are open for your machine concepts. You also benefit from extensive pre-programmed AMK technology functions, an integrated remote maintenance system, and comprehensive services from the conception stage to operation.

You can thus configure, build, and maintain your machines more quickly and efficiently. At the same time your customers benefit from higher cycle counts, faster resetting, greater ease of use, less downtime, increased energy efficiency – and thus also from lower TCO (Total Cost of Ownership).

→ The portfolio for packaging machine building at a glance:



Servo motors | Servo inverters | Centralized drive solutions | Decentralized drive solutions
Motion controller | Engineering tool | Technology functions | Consultation, Service, Training

“WE NEED PRODUCTS THAT ADAPT TO OUR CONCEPTS.”

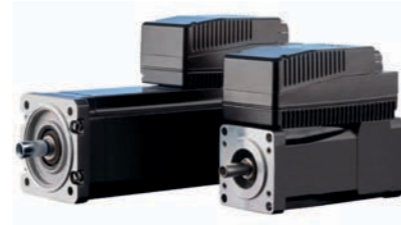
→ Decentralized drive solutions

AMKASmart ihXT servo motors. **Decentralized. Intelligent. Smart.**

Ideal for decentralized auxiliary drives, e.g. format adjustment, material feed, cross-cutting, or gantry drives.

Advantages:

- Extremely compact decentralized servo drive with integrated inverter
- Power range from 150 to 3,000 watts
- Innovative cabling concept
- Up to 90% savings in cable costs



AMKASmart ISA motion controller. **Automation completely free of control cabinets.**

Ideal for modular machine building or as a full-fledged motion controller for smaller stand-alone machines. Intelligent supplementary modules can be integrated in the machine without a control cabinet.

Advantages:

- Easy integration in existing systems
- Motion controller, incoming supply and 24 V supply integrated
- Cross-communication over all well-known fieldbuses
- Visualization via LAN interface is possible



iC and iX decentralized servo converters. **Decentralization made easy. Saves space, time, and effort.**

Servo controllers with and without integrated incoming supply ideal for use in single-axis applications and modular machine structures.

Advantages:

- Enables compact machine design
- Installation without a control cabinet
- Efficient heat removal through intelligent choice of mounting position
- 8.2 A continuous current in minimum installation space, short-term peak current 16.5 A
- Simplified wiring and installation with reduced installation costs
- Extremely easy cabling using commercially-available M23 and M12 plug connectors
- Safety function STO integrated
- Multi-functional I/Os for sensors
- iC for 3x 400V AC supply with DC link supply for additional axes



COMBINE YOUR SOLUTIONS VERY EASILY AND FLEXIBLY.

→ Centralized drive solutions

AMKASYN KE/KW servo converters. **Dynamic. Precise. Multi-functional. Compact.**

The drive system for highly dynamic positioning tasks and maximum energy efficiency.

Advantages:

- Extremely compact design
- Cost-optimized solutions due to modular system structure
- Variable power range
- Choice of cooling system
- Sustainability through regeneration capability
- Single- and multi-axis modules available
- Effective heat removal and increased service life with use of coldplate technology
- Safety function STO integrated
- Assembly of complex/networked machines using precise synchronization in real time
- High efficiency
- Choice of controller cards based on requirements and extensive safety functions



AMKASYN KE/KW controller cards. **Functionality and safety made to measure.**

Application-oriented adaptation of the servo converters.

Advantages:

- Scalable controller cards
- Selection on function-oriented basis
- Extension with extensive safety functions
- High performance
- Speaks all major languages
- Integrated I/Os for sensors



AMKAMAC AIO. **Flexible. Fast. Safe.**

Ideal for acquisition of input and output signals

Advantages:

- Modular design for fast commissioning and intuitive handling
- Easy, fast installation without tools
- “PUSH IN” direct connection system saves time and minimizes errors
- High-speed system bus with up to 256 DI/DOs in 20 μs
- Extremely short response time and fast addressability
- Up to 1024 I/O channels per station



“WE WANT TO MAKE CONFIGURING AND BUILDING EVEN LEANER.”

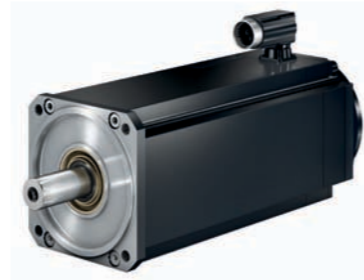
→ Servo motors

DYNASYN DD highly dynamic motors. **Highly dynamic and energy efficient.**

Ideal as positioning, cycle, and main drives.

Advantages:

- Best values for acceleration
- High energy efficiency thanks to very low motor inertia
- Very smooth running due to low cogging torque
- Adaption on a customer-specific basis
- Adaption on a power-specific basis
- Long service life
- Convection- or liquid-cooled



DYNASYN DT high-torque motors. **Powerful and ultra-compact.**

Ideal for applications with intermittent operation and peak loads.

Advantages:

- Very high standstill torques
- High torque and power density
- Extremely compact dimensions
- High overload capacity
- Excellent torque from 0.5 to 1,200Nm
- High degree of protection
- Any mounting position
- Convection-, air-, or liquid-cooled

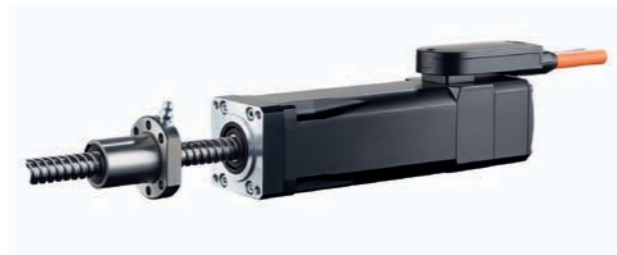


SPINDASYN SEZ electric cylinder. **Powerful. Precise. Energy-efficient.**

Ideal as a positioning drive.

Advantages:

- High and constant force
- High positioning accuracy
- Installation-ready system
- No additional wear parts



WITH AMK YOU HAVE ACCESS TO MORE FUNCTIONS AND SERVICES.

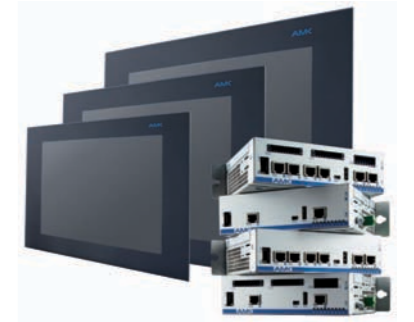
→ Motion controller and engineering tool

AMKAMAK motion controller. **Flexible. Open. Scalable.**

Ideally adaptable to both centralized and modular machine controller concepts.

Advantages:

- Scalable all-in-one solution
- Open for all machine concepts
- Available as a machine controller or in a constructional unit with an IP69K motion controller
- Extremely compact dimensions
- EtherCAT as a real-time fieldbus for an almost unlimited number of nodes in the bus
- Synchronized cross-communication with other controllers in the system for modular machine concepts



AIPEX PRO engineering tool with AMK technology functions. **Simplify your work. Greater efficiency included.**

AIPEX PRO integrates all engineering and service tool functions needed throughout the life cycle of a machine in a single tool. This leaves you free to concentrate on what is really important in your automation solution. To further simplify your engineering, AMK offers you many valuable technology functions you can use in combination with AMK motion controllers and AIPEX PRO.

Advantages:

- Process data can be collected and archived
- Automatic configuration reduces engineering time
- Diagnostics and remote maintenance capabilities are included

The technology functions for easier programming:

- Path control
- Pick & Place
- Cross-cutter
- Register control
- Winder
- Tubular bag packaging



→ Consulting, service, training

Consulting, service and training. **Know-how to help you.**

To give you a competitive edge in the packaging machine building industry, we support you with our comprehensive application know-how in all phases – from the conception phase to operation. This makes it very easy for you to clear bottlenecks and reduce significantly your time-to-market.

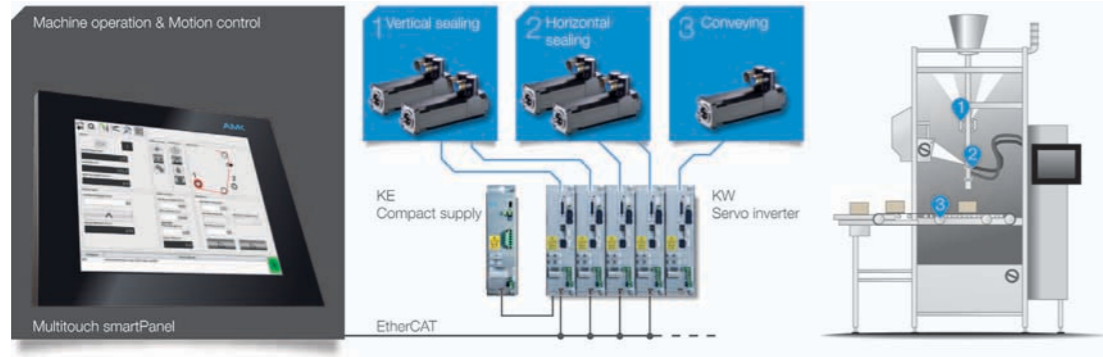
Examples of AMK services:

- Application design
- Project definition
- Programming
- Commissioning
- Service of machines in operation
- Training of employees



“OUR PACKAGING TASKS HAVE VERY SPECIAL REQUIREMENTS.”

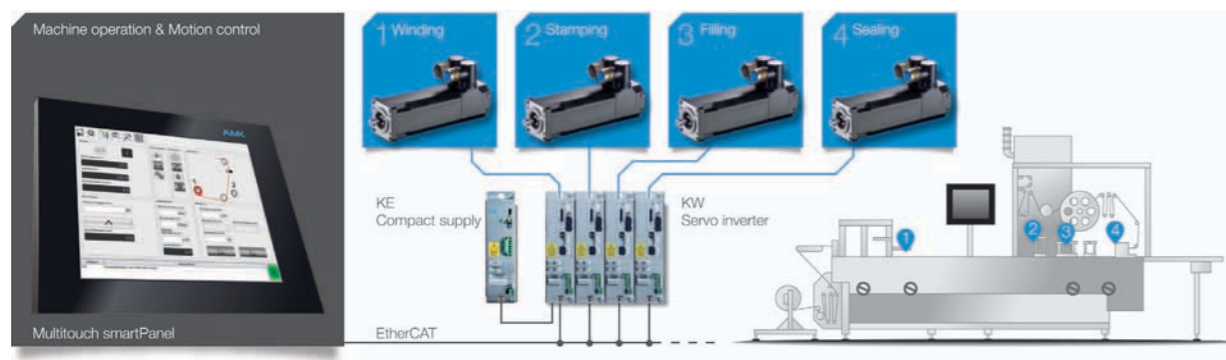
AMK SUPPLIES THE PERFECT COMBINATION FOR YOUR APPLICATION.



→ Tubular bag packaging

AMK advantages for your application:

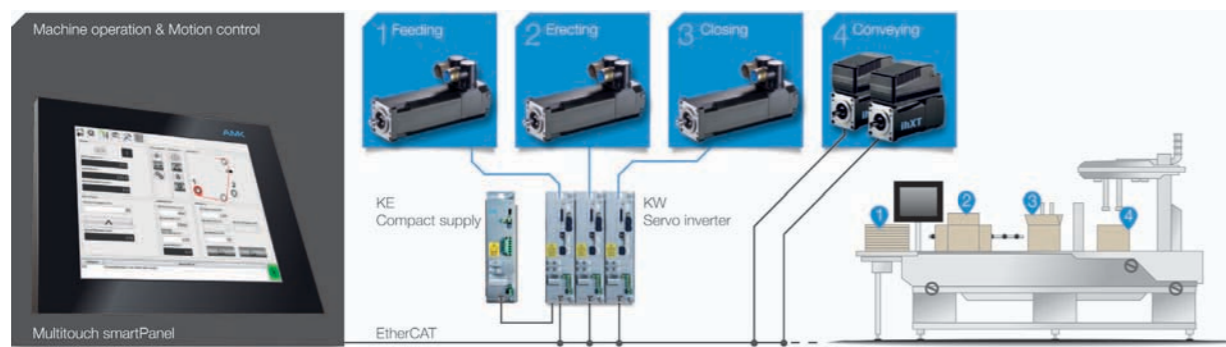
- Ready-made technology functions for tubular bag packaging, winding, and cross-cutting reduce programming effort and time-to-market
- Highly synchronized drives
- Very precise control performance for dynamic processes such as cross-cutting
- Hybrid automation solution from centralized and decentralized drive systems with centralized incoming supply and regeneration
- High energy efficiency



→ Blister packaging

AMK advantages for your application:

- Simplified application creation through ready-made technology functions e.g., unwinding with/without dancer or pressure cell
- Scalable servo motors and servo inverters to match your application
- Fast format changeovers during operation using decentralized auxiliary drives
- Dynamic motors for discontinuous stamping operations



→ Carton forming

AMK advantages for your application:

- Fully-developed solutions for complex and coordinated motion sequences
- Print mark detection, even of micromarks
- Easy addition of options even after machine delivery (without control cabinet)
- Multi-axis assembly with centralized incoming supply and DC link network
- Modular system design with reduced installation costs across decentralized drives

APPLICATION AREAS:

Primary packaging | Secondary packaging
End-of-line packaging | Handling and robotics

APPLICATIONS:

Carton forming | Blister packaging | Tubular bag packaging | Palletizing | Filling | Pick and Place
Cross-cutting | Labeling | Wrapping up | Strapping | Filming | Inserting | Order picking | Sealing



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