

ABB MOTORS AND DRIVES

# Sustainable operation of machinery in food and beverage plants



- Mixers, grinders, milling machines and conches – our motors and drive solutions will keep your machinery operating reliably.
- Using an ABB SynRM motor and drive package will ensure world class energy efficiency.

# Sustainability. Reliability. Quality. Efficiency. Everything counts.

Whether you are producing bread, chocolate, meat, coffee or other products, our motors and drive solutions will keep your machinery operating reliably while ensuring high quality products and saving energy.

## One stop shop

Highest efficiency available with the SynRM and drive package from one supplier.

## Reliable starting

To overcome the friction of the material, high torque from zero speed is required during startup. SynRM motors can deliver full torque from zero speed thanks to the high performance motor control of our general purpose and industrial drives.

## Reliable operation

Whether you are producing confectionery, flour or coffee, you need drives and motors that can deliver high torque right down to a zero speed, day after day. Our products will keep your food processing machinery running reliably while saving energy.

## Non-stop operation

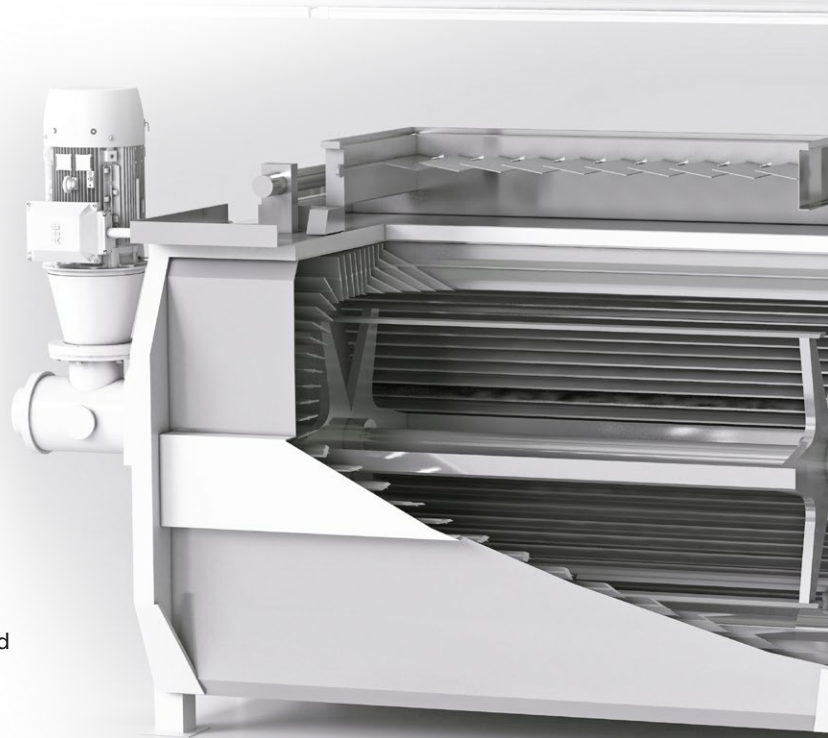
You can depend on ABB drives and motors to keep your food processing machinery running, day after day. SynRM motors run with lower bearing and winding temperatures, which further increases the motor lifetime, and reduces the need for maintenance.

## High efficiency

The combination of SynRM technology with a variable speed drive control offers the highest package efficiency throughout the whole power range. Compared to a conventional AC motor and drive, you can achieve up to 10% more reduction in energy consumption. As a result the payback time for the SynRM solution could be less than one year.

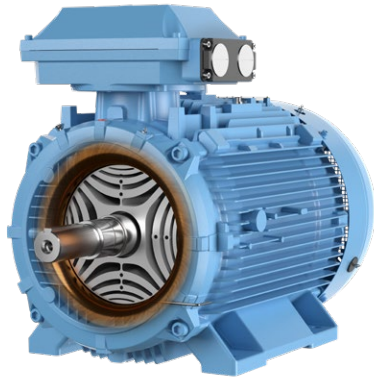
## High quality food processing

Speed regulation is critical to provide consistent products. The ABB package uses the best in class motor control without an encoder. ABB technology provides highly accurate speed control in either open or closed loop. This ensures that a constant speed and torque can be maintained under changing torque conditions.



**We have a portfolio of  
global services to meet your needs**

No matter where your food processing machinery is installed or used, our wide service partner network provides global support available locally. From recovery services to performance improvement services, we can make the difference for you every day by keeping your operations running profitably, safely, and reliably. Our domain expertise is strengthened by a service offering tailored to your needs and delivered through the ABB Motion OneCare agreement.



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ABB offers a broad portfolio of motors for the food and beverage industry that will help you achieve better efficiency and reliability.

#### **IE5 Synchronous Reluctance Motors (SynRM)**

- Very high efficiency – up to IE5 – reduces energy consumption and emissions
- Lower winding and bearing temperatures mean improved reliability and longer lifetime
- Enables higher quality processing through accurate speed and torque control
- Quiet operation reduces noise in the plant for a better working environment
- Available in the power range 5.5-315 kW, IEC frame sizes 132-315
- Magnet free rotor increases reliability and reduces need for service



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All-compatible variable speed drives enable a more efficient operation, extension of the equipment lifetime, and cost savings.

- Drives available with IP21 and IP55 protection class
- Low harmonics based on internal choke
- EMC level C2 due to built-in EMC filter
- Safe torque off (SIL 3/PL e) function ensures machine, production and personnel safety
- Compact design for easy installation, commissioning and maintenance
- State-of-the-art assistant control panel, up to 20 different languages with help functions
- Primary settings and control macros for fast commissioning of the product
- Wide range of fieldbus adapters enables connectivity with all major automation networks
- Bluetooth capability and mobile app to connect and control drives that are difficult to access



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For more information, please contact  
your local ABB representative or visit

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