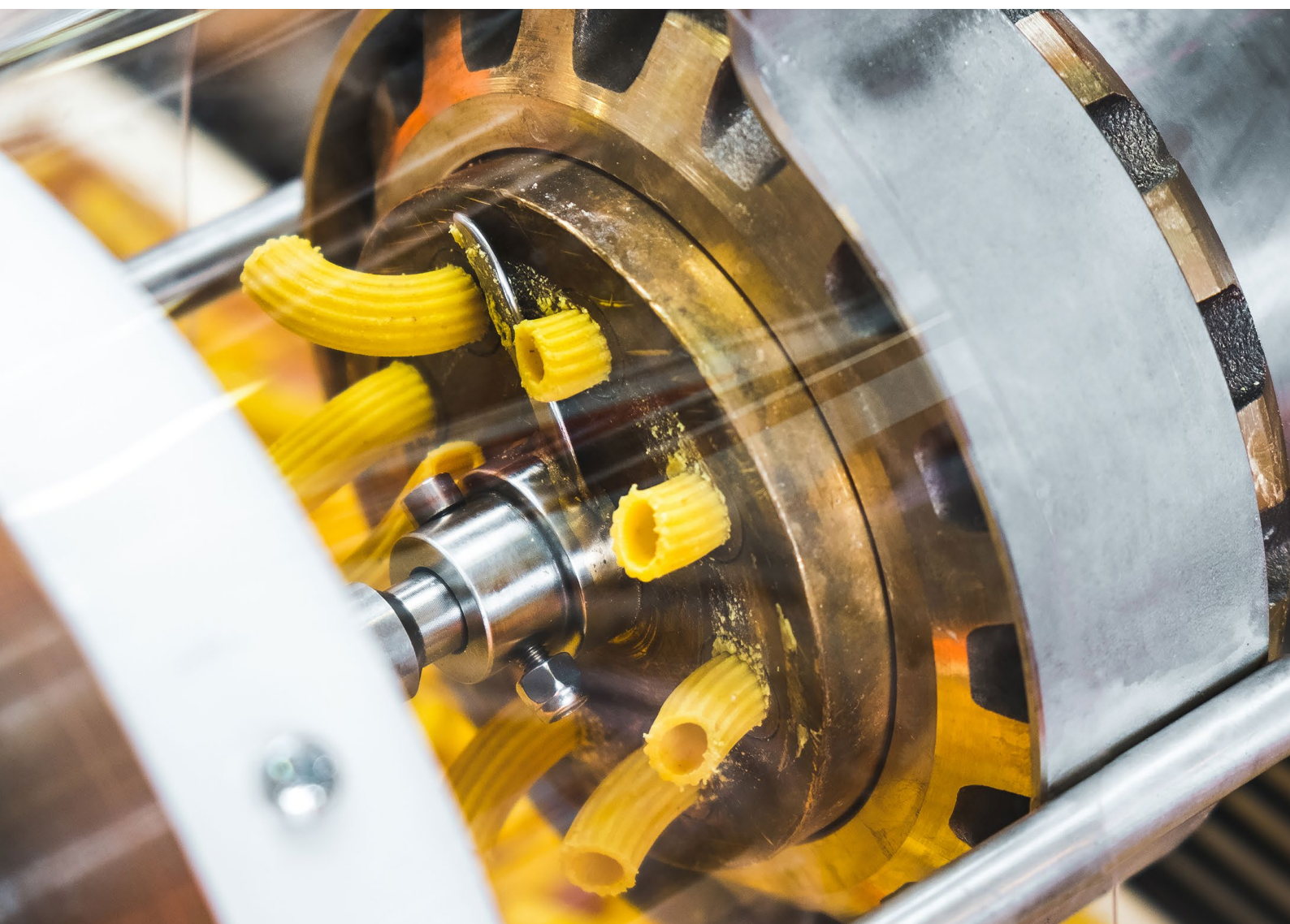


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ABB MOTORS AND DRIVES

# Accurate torque and speed control for reliable extruder operation



# Reliability. Accuracy. Quality. Efficiency. Everything counts.

Whether you are producing confectionery, breakfast cereals or pasta, you need drives and motors that can deliver high torque right down to zero speed. Our products will keep your extruder running reliably while saving energy.

## Reliable starting

To overcome the friction of the material, high torque from zero speed is needed during start-up. SynRM motors can deliver full torque from zero speed thanks to our drives' DTC control technology.



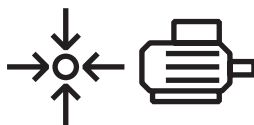
## Non-stop operation

You can depend on ABB drives and motors to keep your extruder running, day after day. SynRM motors run with lower bearing and winding temperatures, which further increases reliability.



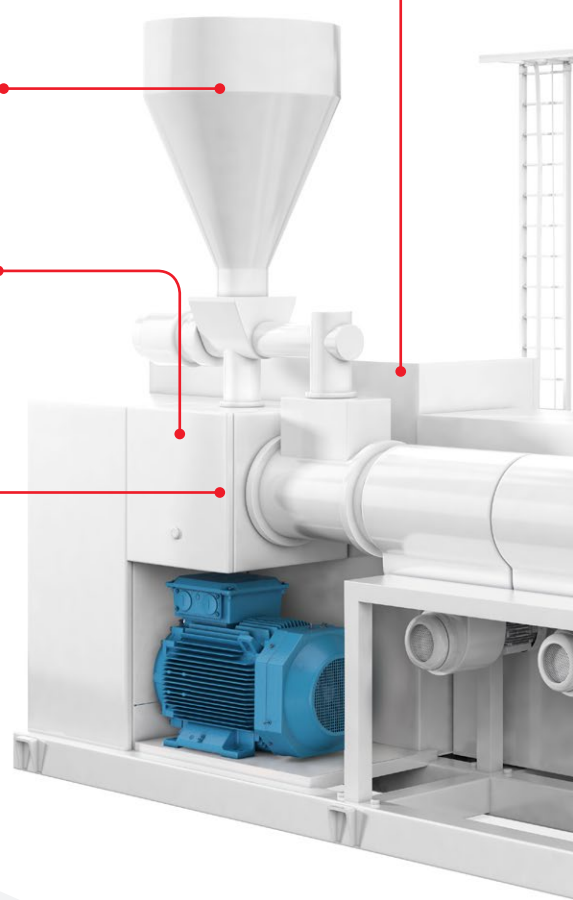
## Quality extruding

SynRM technology with encoderless open loop control provides highly accurate speed control. This ensures that constant speed can be maintained under changing torque conditions.



## High efficiency

The combination of SynRM technology with variable speed drive control offers the highest package efficiency over the whole speed range. Compared to a conventional AC motor and drive, you can achieve a 2-4% reduction in energy consumption. As a result the payback time for the SynRM solution could be less than one year.



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

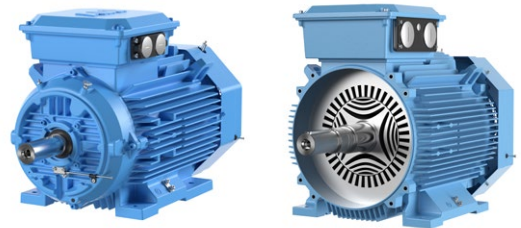
No matter where your extruders are installed or used, our wide channel partner network and global service is always local. You choose the services that fit your needs, from classroom training to customized Drive Care contracts.





Compact drives that offer precise control, flexible integration and broad compatibility with your plant's existing automation networks and systems.

- Direct torque control (DTC) enables full motor torque over whole speed range down to zero – no need for encoders or other feedback devices
- 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
- SIL 3 integrated safety including safe torque off (STO) as standard, plus optional plug-in module providing additional safety features
- Wide range covering wall-mounted and cabinet-built drives and drive modules
- Compact design for easy installation, commissioning and maintenance



Synchronous reluctance (SynRM) motors are efficient, reliable, and provide great controllability

- Very high efficiency – up to IE5 – reduces energy consumption and emissions
- Lower winding and bearing temperatures mean improved reliability and longer lifetimes
- Better controllability enables higher quality extruding through accurate speed and torque control
- Quiet operation reduces noise in the plant for a better working environment
- Available in the power range 1.1-350 kW, IEC frame sizes 90-315

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

**[abb.com/drives](http://abb.com/drives)**

**[abb.com/drivespartners](http://abb.com/drivespartners)**

**[abb.com/drives/segments/food-and-beverage](http://abb.com/drives/segments/food-and-beverage)**

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