

Bottle labelling machines are made up of a rotating carousel equipped with plates along its perimeter. The latter, thanks to either stepper or brushless motors, set the bottles placed on them in rotation.



Rotation movement takes place at nearly every step of the process from bottle conveying to label placing. Sometimes, active components are embedded on a rotating plate and linked to the machine computer. Slip ring can perform this link while offering continuous rotation capabilities. Continuous rotation increase machine performance and reliability while easing the machine design. Slip ring can transfer all signal that can be met in such machines, motor power and control, sensors, field buses, etc. In some cases, integrating the motor manufacturer's proprietary cable such as Sercos III or Powerlink directly in the slip ring can make the solution more robust against electromagnetic perturbations.

## Electrical Features

- Motor power and control through standard or proprietary cables (Bosch, B&R, etc.)
- Automation component supply and signals (I/Os, EtherCAT, Ethernet, Profinet, CANOpen, etc.)
- Sensors (RF, digital)

## Mechanical Features

- Low friction torque
- Various mounting options
- High speed designs available

## Interesting Options

- IP65 for liquid-exposed applications
- Integrated proprietary cables
- Combination with a rotary union for vacuum or pressurized air

 **Advantages**

Long life-time without maintenance (at least 5M rotation)

Full movement programming capabilities

Special proprietary cable integration

 **Benefits**

Low maintenance

Increase machine performances

Easiness of cable integration

 **Facts & Figures**

With a **medium speed of 50 rpm** a slip ring (multi-wire brushes design) can operate at least **5 years** without being replaced

**Power signals and sensors or control signals** (Field bus, motor encoder, etc.) can be embedded in the **same slip ring**