Interroll Smart Solutions
DC Platform
NEW: Economical solutions with 48 V
The DC platform’s new capabilities of producing effective zero-pressure-accumulation (ZPA) conveyor solutions are apparent from the electrical voltage alone. With its 48 V technology, Interroll is capitalizing on the technical evolution taking place in protective extra-low voltage solutions. 48 V systems facilitate the use of up to 50 percent fewer power units than 24 V systems; they allow for longer cable lengths and smaller wire cross sections and reduce the number of error sources, for instance as a result of voltage drops on the wires. This significantly reduces the investment required in the entire system and the risk of errors during commissioning.

NEW: Ready for Industry 4.0 with bus interface
Data transparency: Thanks to the new bus interface, more than 100 parameters can be selected and set. The bus interface is based on the CANOpen standard and paves the way for the fully automated world of Industry 4.0. In combination with the multi-protocol capability of MultiControl BI (for PROFINET, EtherNet/IP and EtherCAT), this means that users can always visualize the data and functions on the screen using the PLC or a web interface. As such, the current operating status, torque and temperature of each and every drive can be read out. The built-in service life indicator, for instance, facilitates preventive maintenance, which can be completed during quieter periods of operation. This, in turn, significantly increases the availability and efficiency of the system.

NEW: Precision positioning for robotic applications
The bus interface not only enables the new RollerDrive EC5000 to read out operating data, but also facilitates millimeter-accurate positioning. Automated processes are perfectly supported and efficiently integrated, without the need for additional cabling. This makes the interplay between the conveying technology and systems deploying robots or gripper arms much simpler.

Smart: Interroll DC Platform
From standard applications to systems with Industry 4.0 functionality: The new DC Platform has the perfect solution to any request.
Many system integrators and plant constructors face the challenge of how to cost-effectively create a tailored system with plug-and-play solutions. The new DC Platform from Interroll is a high-performance technology platform that does just that. It offers – from a single supplier – an innovative, coordinated range of technological solutions, all based on years of development and testing.
Closer look at the technology

Intelligent RollerDrive EC5000

As the most extensive range of motor rollers on the market, this series has the ideal drive to suit the requirements of any conveyor system.

**20 W variant:** Cost-efficient conveyor solution for moving lightweight materials or empty trays.

**35 W variant:** Covers the majority of tray conveyor applications and is compatible with its well-established predecessor, the EC310.

**50 W variant:** The perfect choice for conveying heavy materials of up to 250 kg; also available with a diameter of 60 mm.

---

### Compact switching-mode power units

The robust switching-mode power units with IP54 protection rating are installed exactly where the protective extra-low voltage is needed, rather than in the switch cabinet, allowing for much shorter cable lengths. The space-saving switching-mode power units in 24 V or 48 V have a 50 percent higher peak output and feature integrated brake chopper, automated power limit and adjustable cable protection. They can also produce an integrated analysis of the status, either via LED or a signal cable to the programmable logic controller (PLC). A switch that can be secured against being turned back on allows maintenance work to be carried out on individual sections of the conveyor while other sections are still in operation.

#### Compact switching-mode power units

<table>
<thead>
<tr>
<th>Voltage</th>
<th>24 V DC and 48 V DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>20 W/35 W/50 W</td>
</tr>
<tr>
<td>Speed</td>
<td>Up to 2.41 m/s</td>
</tr>
<tr>
<td>Torque</td>
<td>Up to 13 Nm</td>
</tr>
<tr>
<td>Interfaces</td>
<td>Analog/Bus</td>
</tr>
<tr>
<td>Tube diameter</td>
<td>50/60 mm</td>
</tr>
<tr>
<td>Protection rate</td>
<td>IP54/IP66</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>-30° C to +40° C</td>
</tr>
</tbody>
</table>

---

### Controls for every application

<table>
<thead>
<tr>
<th>Function</th>
<th>DriveControl 20 DriveControl 54 DriveControl 2048</th>
<th>ZoneControl</th>
<th>ConveyorControl*</th>
<th>MultiControl AI MultiControl BI</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZPA logic included</td>
<td>X (GatewayControl)</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

#### Characteristics

- **Easy handling, no field bus handling:** No addressing needed
- **Easy wiring and setup:** Communication to PLC via GatewayControl
- **Certified Ethernet controller:**

**Typical application**

- **Continuous running conveyor:** ZPA conveyor without PLC
- **Indepedently controlled ZPA conveyor:** PLC can monitor and influence/intercept the ZPA logic
- **PLC-managed conveyor systems:** Bigger systems

#### Communication with PLC

- **EtherCAT**: X
- **EtherNet/IP**: X (GatewayControl)
- **PROFINET**: X (GatewayControl)
- **Digital I/Os, no field bus**: X

#### Parameter settings

- **Interface to EC5000**: 24 V DC (DriveControl 2048: 24 or 48 V DC)
- **Start/stop ramps configurable**: Only fast and slow (DriveControl 2048: 4 different ramps)
- **Bus interface**: MultiControl BI
- **I/O connections**:
  - **Zone sensors**: 0
  - **Digital I/Os**: 0 (start sensor), 2 inputs/3 outputs (ConfigControl), 41 I/Os (configurable)

#### Suitable for deep-freeze applications

DriveControl 54: IP20

---

*With GatewayControl

**ZPA = zero-pressure accumulation; PLC = programmable logic controller; AI = analog interface; BI = bus interface; I/Os = inputs and outputs**
• Backward compatibility
• Expert application advice
• All-round service
• Ultimate quality
• Extremely fast lead times

This perfectly compatible range of controls, motor rollers and power units, even in combination with Interroll’s Modular Conveyor Platform (MCP), offers a unique choice of conveying solutions – from autonomous conveyors that can be commissioned on a plug-and-play principle and without a PLC, all the way to tailor-made high-performance systems that can be integrated consistently and transparently into the data universe of Industry 4.0 applications for the purpose of monitoring in control stations, for preventive maintenance or for other functions.

Find out more at interroll.com or contact us. We look forward to hearing from you!