

INSPECTING, PACKAGING, SORTING AND PALLETIZING WITH IO-LINK

Background

Packaging has some very complex automation needs: all the way from die cutting, carton erecting, filling, inspecting and closing, to multi-packing and palletizing. In addition to these actions, which require split second timing, there is also the need to reconfigure equipment to accommodate runs of different material or to perform operations on packages of different dimensions.

In short - versatility, simplicity and configurability are key. Not all products and systems are designed with flexibility, and interchangeability in mind. Fortunately there is a solution.

*The simplicity of IO-Link
with the strength, flexibility
and performances of Sensata
encoders and sensors*



Solution

The IO-Link system integrated in Sensata encoders and sensors is built with automation in mind. It has a simple master-slave structure, hubs that can be used to share signals with the master and either actuators (outputs) or sensors (inputs) can be plugged in through a handful of standard plug configurations. Products can be reconfigured on the fly. Performance parameters can also be stored in the IO-Link Master so that a replacement sensor can be readily configured after replacement.

Sensata sensors supports Industry 4.0 objectives and the 24 volt standard. It also uses the highest allowed communication speed (COM3) under IO-Link protocol with a baud rate of up to 230.4kbaud.

The AHx5 (single-turn) and THx5 (multi-turn) IO-Link absolute encoders with high resolution are suitable for measuring any kind of position control in the packaging line; DHx5 (incremental) are the ideal solution for speed control of belt conveyors. The ACW4 (single-turn) and TCW4 (multi-turn) IO-Link modular sensors are the best alternative and cost effective solution in case of limited spaces and mounting limitations.



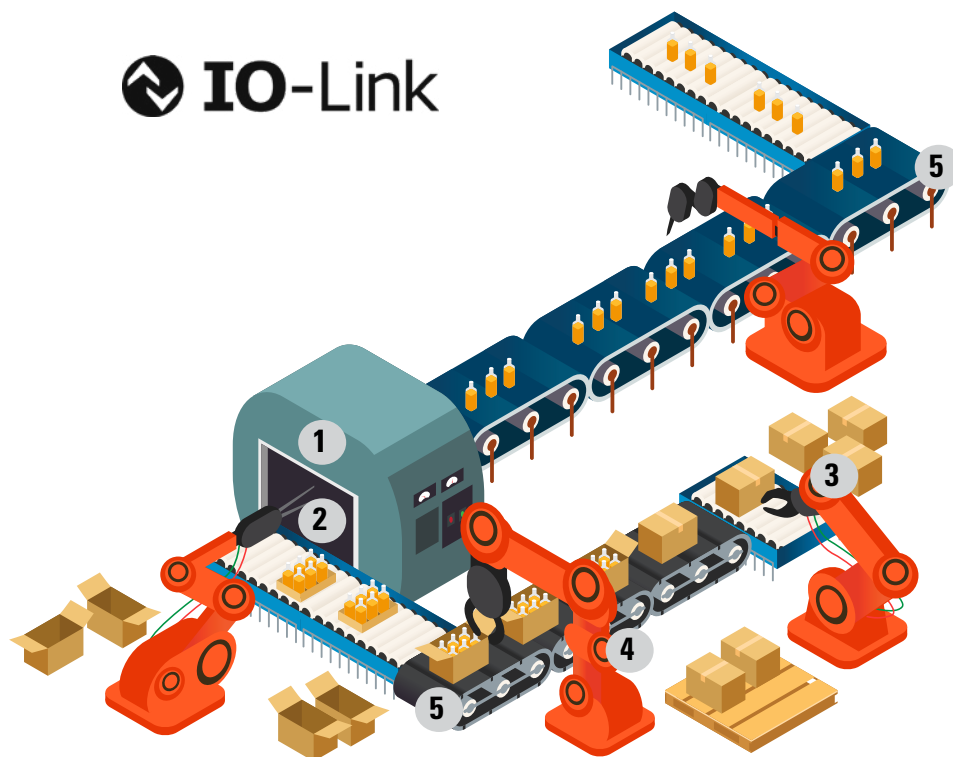


RECOMMENDED PRODUCTS

Reference on Diagram	Product	Type	Features	Part Number	Function
1	ACW4	Single-Turn Hall Effect Sensor	IO-Link interface	ACW4_00//ZIOB//12//BDR003	Internal layer inclination
2	TCW4	Multi-Turn Hall Effect Sensor	IO-Link interface	TCW4_00//ZIOB//12B16//BDD003	Protection opening
3	AHx5	Single-Turn Encoder	IO-Link interface	AHK5_14//ZIOB//16//BFR//	Arm angle
4	THx5	Multi-Turn Encoder	IO-Link interface	THM5_06//ZIOB//12B16//BFR//	Arm rotation
5	DHx5	Incremental Encoder	IO-Link interface	DHM5_10//RGZ9//EPROG//I6R//	Conveyor speed



DIAGRAM



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