

## Compact plant design with IO-Link

Reduced wiring complexity enables space savings  
on packaging machines



**Our customer:**  
A leading OEM of  
packaging machines

One of the market's leading OEMs in the construction of new and refurbished packaging machines for the pharmaceutical and cosmetics industries. Products include fully automated equipment for packaging production, preparation, filling, conveying and palletising.

The company's services include the development, manufacture and maintenance of fully automated robotic systems for the packaging of pharmaceutical and cosmetic products. Customers include well-known manufacturers from the industry.



## CASE STUDY | PACKAGING INDUSTRY

### The challenge:

In order to be able to offer customers from the pharmaceutical and cosmetics industries products that are as convenient and reliable as possible, attention is always paid during the development of the packaging machines to ensure that the systems will be as compact and user-friendly as possible. Therefore, the goal was to reduce the amount of wiring from the sensor to the controller and, at the same time, gain more space in the compact plants. In addition, the aim is to avoid plant downtimes and make troubleshooting easier. This is to be simplified by digitalising many processes, for example, by detecting additional sensor process values that can be provided as well.



### The solution – why ifm?

Therefore, the customer has chosen to use IO-Link masters and modules from ifm in their packaging machines in recent years. One of the main advantages of this solution is that the devices can be used directly in the field. This simplifies hardware installation and reduces the length and number of cables used. This makes installation much easier and faster and reduces the possibility of wiring errors. In addition, the compact and digitalised system design will save a lot of time when troubleshooting in the event of a malfunction.

Since the beginning of the project and due to the connectivity via IO-Link and the goal of preparing

all new plants for IoT, the plants were equipped with IO-Link masters, modules, photoelectric sensors and safety light grids from ifm to enable optimum hardware interaction. The photoelectric sensors detect the packages during various processes in the plants and check the correct position. In addition, safety light grids offer customers maximum safety for their employees.



### Results:

- Reduced wiring complexity
- Quick and easy maintenance is possible
- Compact plant design is supported
- Fast troubleshooting in the event of a fault
- Industry 4.0 preparation through IO-Link



Reduced wiring complexity



Compact plant design is supported



Easy and fast troubleshooting



[ifm.com](https://www.ifm.com)

