

CASE STUDY | FOOD INDUSTRY

Increase in efficiency along with cost savings of more than $\leq 10,000$



Rhett Story



Our customer:

A global manufacturer of industrial plants for the food and beverage as well as the energy industry. A total of 5,000 employees ensure that customers become "more sustainable" while producing safe and healthy products.

The company optimizes the efficiency of their plants with every new project. The challenge associated with this is that control cabinets with Profinet connection do not provide the sort of flexibility required for structural plant design. Using IO-Link solutions from ifm provides a remedy here.

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The challenge:

Innovative processing technologies for customers in the food and beverage industry require a large number of sensors and actuators to meet the highest demands in terms of availability, efficiency and quality. To record the measured values and signals and to control the plant, an increasingly complex network is necessary. Complex cable harnesses, however, are prone to errors and difficult to adapt to customised plants. Timesaving and flexible solutions are here offered by Ethernet IO modules, which enable a decentralised automation solution directly at the machine.



"Harsh" operating conditions in foodproduction due to cleaning processes using high pressure and chemicals often push IO modules to their limits. As a number of manufacturers cannot meet the required IP protection class, an additional control cabinet is required to protect the technology. This renders the solution both more complex and expensive.

The solution – why ifm?

The consistently high IP protection class of all ifm IO-Link components enables a decentralised automation solution directly at the machine without additional control cabinets.



ifm's solution helps this customer to save more than \in 10,000 in material costs. Control cabinets to protect the IO-Link modules are no longer necessary, and the need for connection technology and splitter boxes has been significantly reduced. The sealing technology of ifm sockets, which has been tried and tested in the market for years, in combination with the special design IO-Link master for the food industry, meets the highest requirements regarding chemical resistance and protection class (ECOLAB and IP69K). With the M12 connectors, malfunctions due to incorrect wiring are excluded and the installation can be entrusted even to less experienced personnel. IO-Link is an open standard jointly developed by a large number of manufacturers, allowing actuators such as valve terminals to be integrated and provide for a reduced plant infrastructure. What is more, all these customer benefits taken together increase the efficiency during commissioning - the time required can be reduced by around 25 %.



Results:

- Reduction of installation time by approx. 25%
- Decrease in error rate during wiring
- Reduced need for connection technology and splitter boxes
- Cost savings of more than 10,000 €, control cabinets are no longer required





(ECOLAB and IP69K)

25% Quicker and simpler setup

€ 10,000 Savings in material cost



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