

A detailed view of an ice cream factory's production line. Multiple mechanical dispensers are shown in the process of filling waffle cones with white ice cream. The cones are arranged in rows on a conveyor system. The background shows more of the industrial machinery and the continuous flow of the production process.

NETWORK CONNECTIVITY SUPPORT FOR AN ICE CREAM FACTORY

SUMMARY

The saying “there’s beauty in simplicity” perfectly describes a situation where you decide to cool yourself down with ice cream on a hot summer day. However, you’d be surprised to learn that the ice-cream-making process is far more intricate than it is savory.

Ice cream manufacturing facilities are filled with a variety of units, starting with ingredient dispensers and ending with giant freezers. They must work simultaneously; otherwise, the ice cream will melt... and nobody wants that.

CHALLENGE

Before ice cream hits the market, it has to undergo an intense journey at an ice cream factory. Through processes of mixing, pasteurizing, and freezing, each factory line must maintain a relatively cool temperature and efficient workflow – or else the ice cream will melt, resulting in immense financial damages.

Since ice cream production processes are temperature-sensitive, they require real-time operations monitoring, maintenance alerts, and data insights to help track the system’s continuous functioning. To meet these needs and prevent ice cream from melting, machines, computers, and platforms must be compatible with each other and able to communicate their status through network connectivity. However, the challenge doesn’t end here.

Ice cream factory lines come in all shapes and sizes, some of which leave little to no additional space for attaching extra devices. Thus, the solution must not only provide network connectivity to each factory line but be easy to install in a constrained environment too.

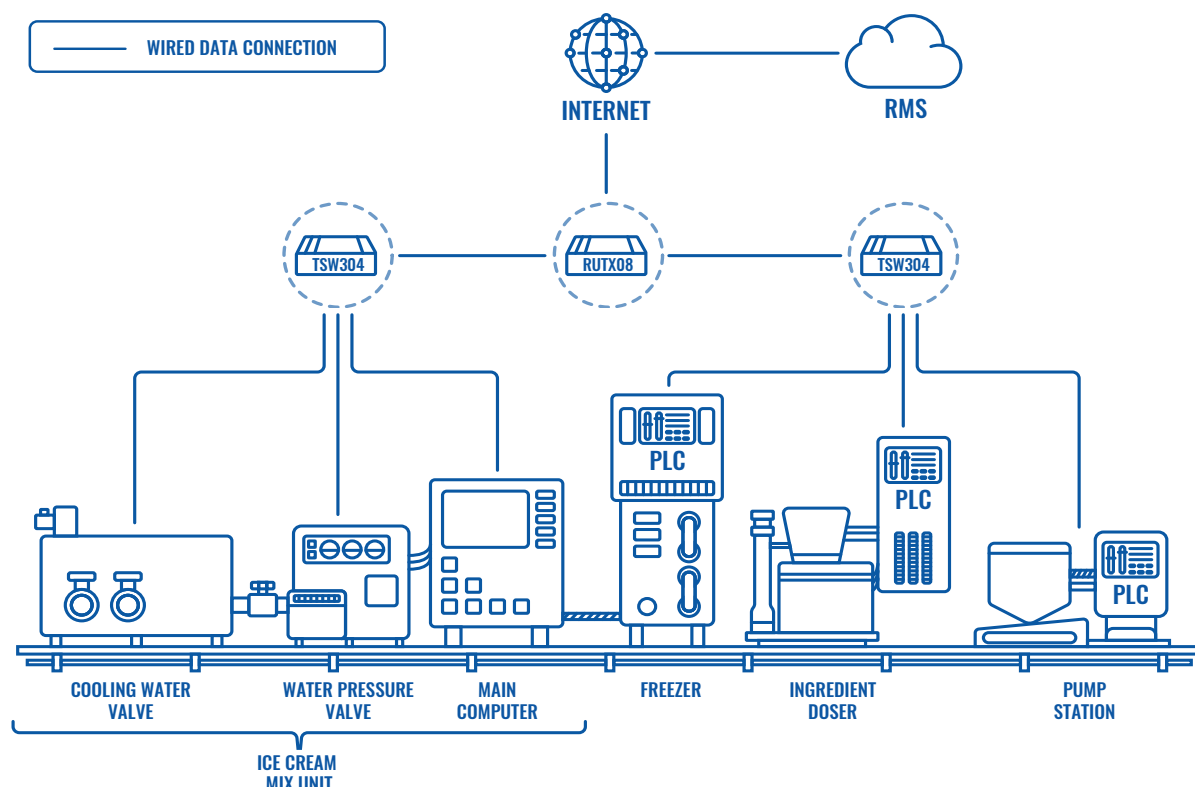
SOLUTION

Thanks to the reliable network support and easy-to-install design, the TSW304 switch is the best solution for making each machine connected into one integral system. The TSW304 was created to support reliable network connectivity, but more importantly – provide easy and convenient installation possibilities.

Amongst our switches, the TSW304 excels with its design: with a built-in DIN rail mount and front-facing ports, it can be installed even in the most intricate places without taking a lot of space. Since it has four Gigabit Ethernet ports and is tiny in size, the number of ports can be increased for any solution by placing multiple TSW304 switches next to each other in places like server rooms or assembly lines. This way, switches can accommodate more devices with network connectivity while maintaining a compact setup that just so happens to resemble an ice cream sandwich.

And a bonus point! This switch can operate in freezing temperatures of up to -40 °C, making it more than comfortable in the cold environment of an ice cream factory.

TOPOLOGY



BENEFITS

- A built-in DIN rail mount, front-facing ports, and compact size makes the TWS304 switch easily adaptable to any industrial environment;
- This switch is equipped with four Gigabit Ethernet ports that provide a stable and reliable network connection to multiple factory devices at once;
- The device was designed with practicality in mind, so when there's a need for more than one switch, TSW304 switches can be placed next to one another compactly.

WHY TELTONIKA NETWORKS?

As the need for a switch with a built-in DIN rail mount became clear, our team dedicated time and energy for creating the TSW304. Filling such needed niches is why our partners routinely choose our high-quality devices that ensure fast and reliable network connectivity and easy installations in non-standard environments. With our well-thought-out devices, smart solutions can be achieved without needless hassles.

