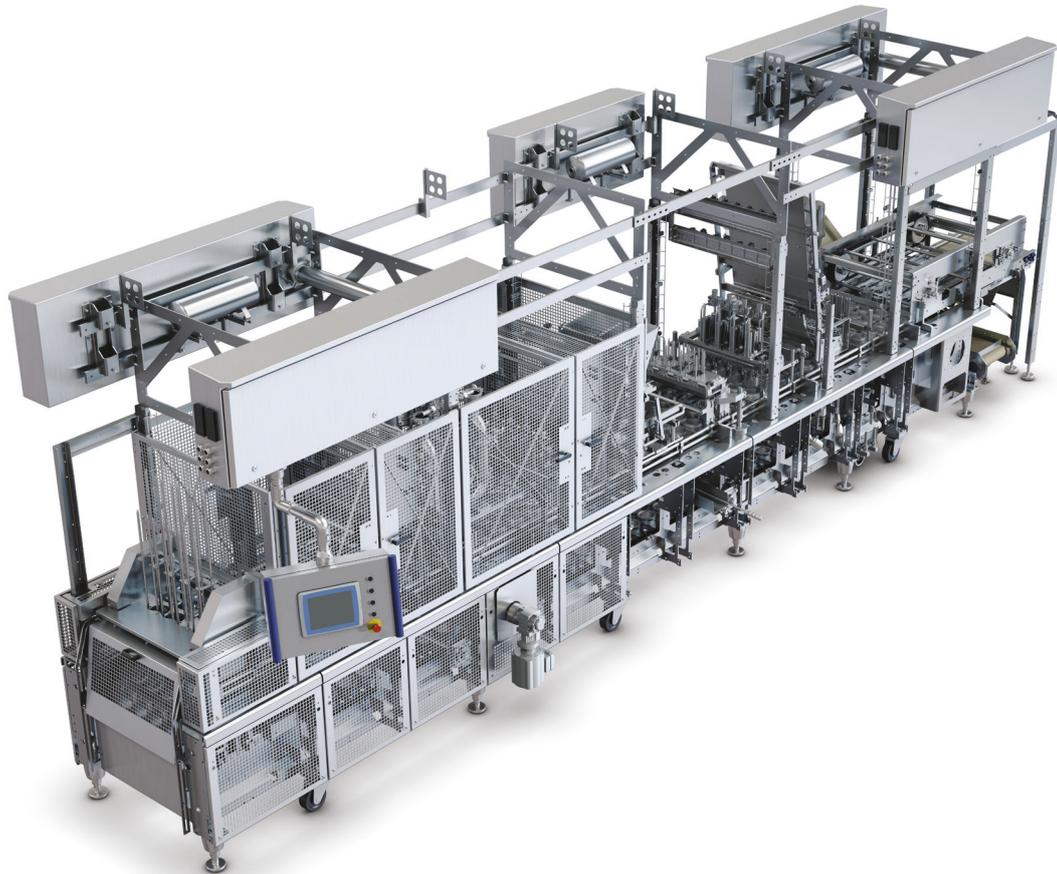


# Tetra Pak® Ice Cream Choice Filler A1



## APPLICATION

Tetra Pak® Ice Cream Choice Filler A1 can fill most ice cream, sorbet and water-ice products into cones, cups, screw balls, tubs, large containers, push-ups and squeeze tubes of varying design, shape and size.

## HIGHLIGHTS

- Flexible, modular design
- Compact and flexible footprint
- High capacity – up to 57,600 products/hour
- Hygienic, easily cleanable design
- Ergonomic design for optimal operator safety

## WORKING PRINCIPLE

Tetra Pak® Ice Cream Choice Filler A1 has a robust frame and can be customized to meet specific production requirements. The length, width and number of lanes can be chosen flexibly. Many different types of adjacent equipment can be connected.

The cones, cups, tubs or other containers are dispensed individually from bulk stacks and placed in the lamellas. The packaging is transported by an indexing conveyor with defined seat through the filler where several customized stations are involved to handle, control, fill, decorate and close the product.

For cones, the chocolate sprayer sprays a precise amount of chocolate into the cone interior prior to filling. Ice creams, sorbets and water-ices are filled by either time-lapse filling or by volumetric filling. Decoration with a number of different viscous or solid ingredients is possible and a full range of optional decoration equipment is available.

A variety of lid-dispensers are available to match each product design. Heat sealing using pre-cut foil lids or roll-stock foil is also available.

After being fitted with lids and sealed, products are lifted up from the lamellas and transferred to a downstream equipment like a hardening tunnel by an automatic handling system such as linear transfer unit for cones or a pusher for tubs.

In addition to the actual filling equipment a wide range of control systems are securing the best product quality and highest efficiency.

## STANDARD UNIT

Each filling machine consists of several stainless steel modules that are bolted together with heavy duty stainless steel connectors. The frame has a railing for quick installation of stations.

The safety guarding consists of doors, fixed panels or secure folding doors in laser cut quality. Every openable door is equipped with a security query and e-locks.

Thanks to a semi-automated changeover process, lamellas can be changed rapidly. This makes it easy to switch between different production runs.

The modular "Bolt-on" design enables filler extension or de-extension – it can be performed at any time on production site to accommodate market needs or product changes.

The pneumatic terminals are located in an elevated position along the filler for short connections to the actuators to enable precise timing and energy savings. For many stations are servo driven alternatives available.

Tailored filling equipment for all types of products from single-flavor basic filling to sophisticated multi-flavor filling in complex filling pattern with rotation. All kind of inclusions and ripples can be handled.

Precise dosing for minimal waste and overfilling by individual controlled fast-reacting pneumatic valves.

The Tetra Pak® Ice Cream Choice Filler AI is designed for highest flexibility for all customer needs.

## MAIN COMPONENTS

### CUP FILLING

- Cup dispenser
- Cup control system
- Filling valves in different designs
- Wet topping
- Dry topping
- Heat seal lid dispenser
- Heat seal station
- Closure lid dispenser
- Lid tamper
- Upright discharge unit onto inline belt conveyor

### CONE FILLING

- Cone and Sleeve dispenser
- Sleeve control
- Chocolate spray
- Filling valves in different designs
- Wet topping
- Dry topping
- Lid dispenser
- Crimping
- Coding
- Transfer systems

### OPTIONAL EQUIPMENT

- Buffer and supply systems
- Quality control systems
- Reject systems
- Sampling systems
- Multi-axis filling stations
- Heat sealing (inside or star)
- Pump stations

## CONTROL PANEL

Tetra Pak® Ice Cream Choice Filler AI is controlled by an Allen Bradley Guard ControlLogix PLC. It is controlled via a central PLC control system, enabling more accurate control and easier product change-overs. The PLC allows automatic start-up and end-of-production shutdown.

## CAPACITY

### LAMELLA SETUP

**Indexing pitch:** : 4", 6", 8", 10", 12"

**Width:** 500 mm to 1600 mm

## TECHNICAL DATA

### Electrical power

Connections	3 ~ 400 V, 50-60 Hz
Total consumption	Depending on filler setup
Main breaker	50 A

### Compressed air

Supply pressure	6 bar
Total consumption $V_N$	Depending on filler setup

### Water (lamella cleaning device)

Consumption (during cleaning)	50 l/min
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## LAYOUT

Available in lengths between 3.6 and 14 metres.

Machine footprint example: 9.2 m filler frame, 800 mm lamella width

