



Tetra Pak[®] Automatic Stick A2 flex arch

Flexible, easy-to-operate ice cream stick inserter



Application

Tetra Pak[®] Automatic Stick A2 flex arch is designed for inserting sticks into extruded ice cream products. The sticks are fed in unbundled bulk cartons to the stick inserter prior to insertion in ice cream products produced on a tray tunnel extrusion system.

Highlights

- Precise stick positioning
- Easy feeding of sticks in bulk cartons
- Standalone unit with flexible arch for easy positioning
- Control system with automatic alarm signals and recipe control

Working principle

A conveyor chain continuously conveys sticks one by one from the bulk magazine into a vertical stacking unit. The stacking unit feeds the sticks into a buffer magazine, from which they are transferred to the electrically servo-operated stick inserter unit.

Basic unit

Tetra Pak Automatic Stick A2 flex arch is made of sturdy stainless materials and is designed to provide full stability for the inserter mechanism during operation.

The unit is designed for easy maintenance. Its modular design makes it simple to change a single part or a complete unit, such as the magazine. All parts and modular units are available as spare parts.

Several lengths of sticks and two types, straight and paddle, are supported with minimal changeover time. The unit is electrically driven by a servo motor that powers the stick inserter module.

Main components

Exact stick positioning

Stick position can be adjusted during operation to provide exact positioning at an accurate depth in the product. The stick inserter's robust construction ensures exact positioning is maintained throughout the production process.

Standalone unit

Tetra Pak Automatic Stick A2 flex arch is a standalone unit that is typically interfaced with the extrusion line. The inserter can easily be disconnected and removed when the extrusion line is producing stickless products.

Bulk magazine

The bulk magazine is designed for loading with cartons containing 5,000-10,000 sticks. This ensures that reloading will only be required once per hour, even at high speeds. Carton changeovers are easily carried out during operation without interfering with production.

Control panel

Tetra Pak® Automatic Stick A2 flex arch is controlled by an Allen Bradley or Siemens PLC. This is fitted in a cabinet located on the stick inserter or optionally in a remote cabinet. The PLC control system provides total process synchronisation with the extrusion line and control of moving parts. In the event of a deviation, such as missing sticks, an alarm immediately sounds and the control panel will indicate the cause.

Capacity

With operating speeds of up to 200 sticks per minute, Tetra Pak® Automatic Stick A2 flex arch meets the requirements of high-capacity stick ice cream production on all types of tray tunnel extrusion systems.

Range of suitable sticks

As standard, Tetra Pak® Automatic Stick A2 flex arch is configurable to run with either ordinary sticks or paddle sticks. In both cases, two different sticks types are supported:

- Standard ordinary sticks:
10 and 14 mm wide, 80, 93 and 114 mm long
- Standard paddle sticks:
17 mm wide, 73, 85 and 94 mm long

Special models are available for round and other non-standard sticks.

An agreed quantity of stick samples should be sent to Tetra Pak. We will evaluate the samples' sustainability and make recommendations based on past experience or agreed laboratory tests. Because it is not always possible to foresee or simulate actual production conditions, these recommendations should, unless otherwise agreed, be regarded solely as a guide and not considered to be a warranty or legal obligation.

Consumption data

Electrical system

Standard 3 x 400 V	50 Hz
Power consumption	6 kW (8.15 hp)*
Main circuit breaker	16 A*

Shipping data

Net weight	275 kg (606 lbs)
Gross weight	450 kg (992 lbs)

* Optional according to customer specifications



