

# AQ-Max, in 5 points

**PACKAGE VERSATILITY:** plastic, glass, metal in various shapes and sizes

**PRODUCT PROTECTION:** low pressure flow

**FIFO (FIRST IN FIRST OUT) OPERATION**

**COMPACT:** up to 33 % space savings compared to traditional accumulation systems

**EASY MAINTENANCE AND UPKEEP**



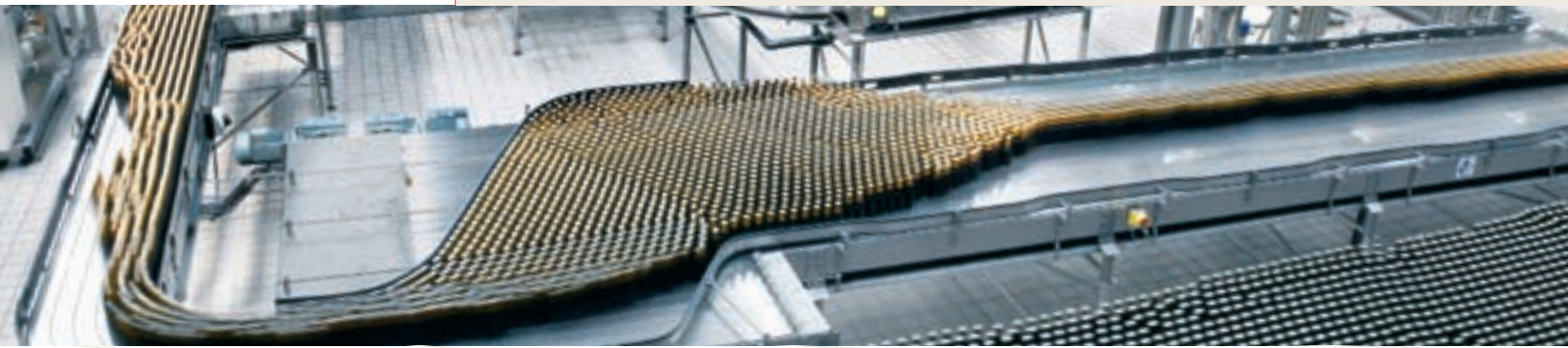
*Packages, until now transported all together, are conveyed in single file by the pressure-free combiner.*



[www.sidel.com](http://www.sidel.com)

# AQ-Max

**Compact dynamic accumulation**



ACCUMULATION IS CRITICAL TO UNINTERRUPTED LINE OPERATION. SIDEL DEVELOPED ITS AQ-MAX LOW PRESSURE ACTIVE ACCUMULATION SYSTEM TO GIVE YOU UNINTERRUPTED LINE OPERATION IN A SMALL SPACE TO GUARANTEE TOP PRODUCTION EFFICIENCY.

# Flexible and innovative flow control

## **VERSATILE ACCUMULATION**

The AQ-Max accumulation table can be used to convey plastic bottles, glass jars and metal cans in many shapes and sizes (cylindrical, oval, and rounded square shapes). The table is particularly well-suited for handling empty PET bottles that stick together and are easily deformable causing malfunctions on traditional pressure systems.

## **SMOOTH FLOW**

The AQ-Max table's pressure-free operation, based on natural, mechanical regulation, generates 10 times less pressure than traditional systems. This low pressure flow gently handles products and keeps them from jamming. It limits scuffing of packages and labels. With fewer blockages upstream and downstream from the accumulation, the infeed and discharge conveyors do not become full. Thanks to a FIFO (First In First Out) design and the elimination of package stagnation, the AQ-Max enhances production traceability.

## **MAXIMIZED EFFICIENCY**

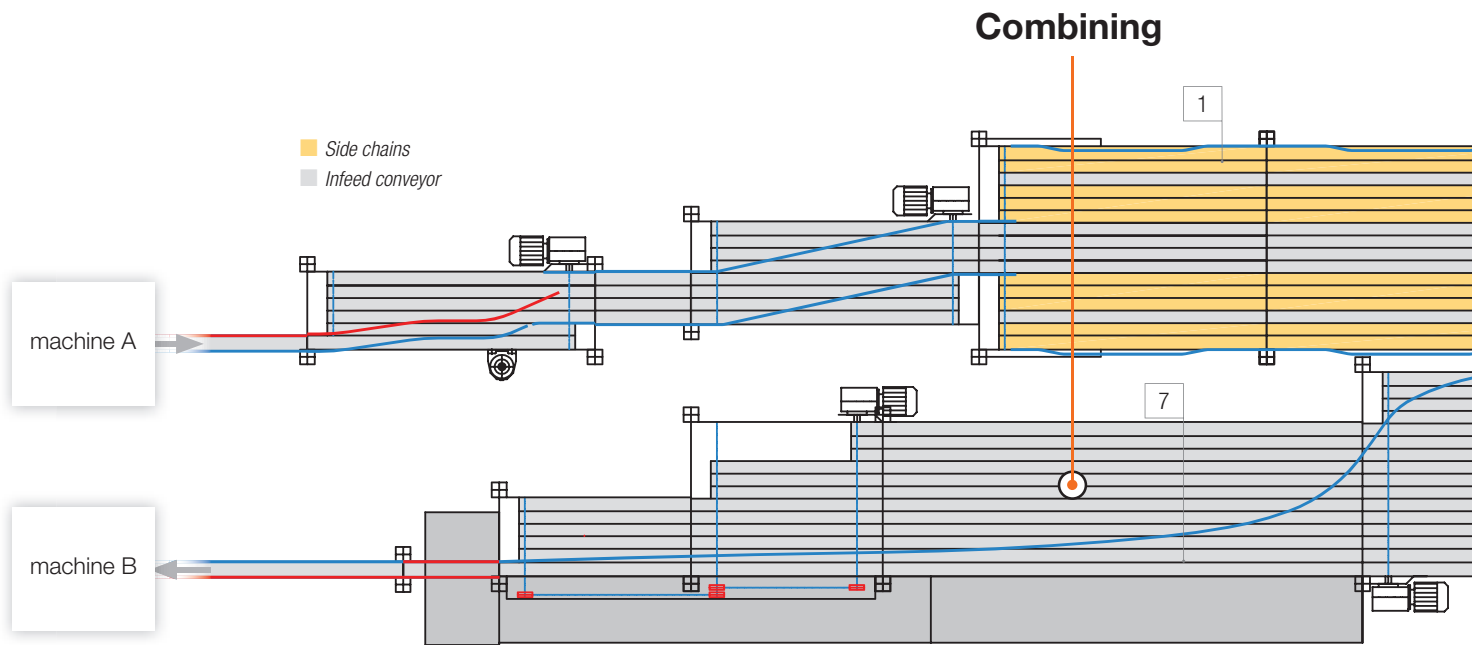
With its innovative, patented design, Sidel's AQ-Max table manages accumulation, critical for line control. It is an efficient, compact accumulation system with a footprint that's 33 % smaller than traditional accumulation systems. With nearly 100 % of its surface in use, its output is also 30 % higher than traditional accumulation systems. Its new drive design can handle a wide variety of products and formats without requiring adjustments, and it improves your line's operational availability. Its simple, open structure facilitates maintenance and upkeep.

## **INTELLIGENT AUTOMATION**

The AQ-Max active accumulation system is a self-regulating, independent conveyor module that also regulates upstream and downstream machines. In a filler-capper-labeler configuration, the AQ-Max handles both discharge and accumulation. It maintains a discharge area from the filler and maintains the proper accumulation capacity to keep the filler from shutting down in case of problems with the labeler.



*Plastic, glass or metal, the AQ-Max is highly versatile.*



## NATURAL, MECHANICAL REGULATION

The AQ-Max's concept of accumulation relies on simple, mechanical principles.

- 1.** During the accumulation phase, an infeed conveyor and two side accumulation conveyors transport products to the AQ-Max table.
- 2.** At the end of the table products are distributed as they gently push one another to the side conveyors that are stopped or moving very slowly.
- 3.** Thus, the leading edge of the accumulation moves along keeping products in the same order as they entered the conveyor (FIFO principle).
- 4.** At the table exit, the speed of the side chains is modulated and the proportion of packages on the table is balanced for pressure-free evacuation. Thus, recovery times are much shorter compared to traditional systems.

## GENTLE COMBINING

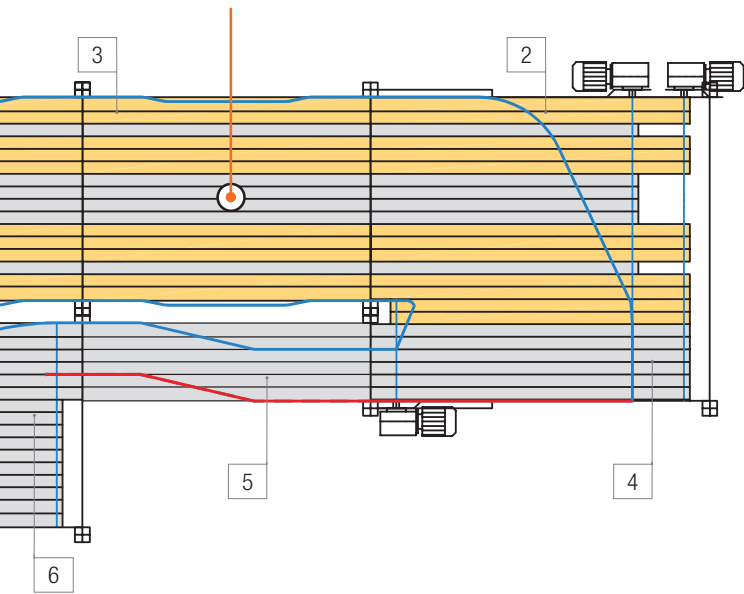
The ability to combine the AQ-Max table with a pressure-free combiner from Sidel ensures pressure-free feeding of the downstream machine. Sidel's combiner features excellent control even at high speeds.

- 5.** Sidel uses a simple flow crossing method to optimize the combining phase. Two chains operating at low speed gently reverse the movement of products as they exit the table.
- 6.** The feeding conveyor gradually speeds up the movement of the packages to get them ready for combining.
- 7.** Then, the pressure-free combiner transports packages in single file that had, until now, been transported all together.



AQ-Max takes up 33 % less space.

# Accumulation



1	
2	3

- 1 - Nearly 100 % of the AQ-Max surface is used.
- 2 - The AQ-Max features output rates that are 30 % higher than traditional systems.
- 3 - The AQ-Max smoothly regulates your upstream and downstream machines.

