



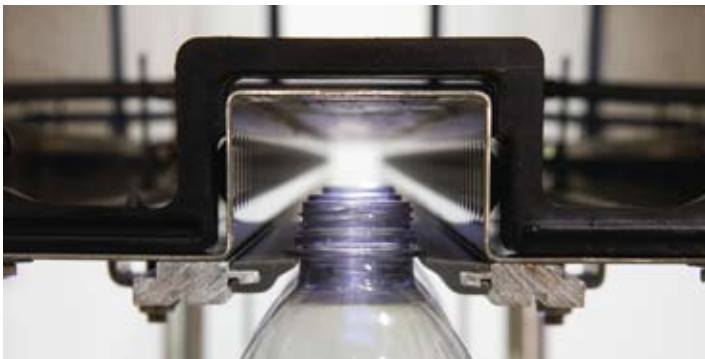
# Air conveyors

**A key factor for the productivity of your lines**



YOUR PACKAGING HAS STRATEGIC VALUE, AND THIS IS WHY IT HAS TO ARRIVE INTACT – BOTH IN TERMS OF HYGIENE AND OF APPEARANCE – AND QUICKLY AT THE FILLER. AND OF COURSE, IT HAS TO CONTRIBUTE TO THE OVERALL PERFORMANCE OF YOUR LINE.

# Optimize the your line performance



*Friction coefficient, format changeover, maintenance: we pay special attention to your bottle's neck guide rail.*



*Sidel's patented, new high-speed switching system increases performance and improves production flexibility.*

## **INDUSTRIAL GEOMETRY**

The shortest path between two points is a straight line. However, this is not always the most rational or the best possibility under real industrial conditions.

Your empty bottle leaves the blow molder. It heads straight for 20 meters, takes a sharp 90° turn, is lifted up 3 meters, splits at a switching point, and passes through a wall, before dropping down towards the filler. Before reaching its destination, your bottle travels several times the real distance between the two machines.

The several seconds that the bottle takes to make this trip are used to separate bottle production from the bottling area, to save ground space, to ensure good operation of upstream and downstream machinery, and to isolate a few samples for verification...

Because industrial geometry knows no rules other than performance, our air conveyor range includes all the necessary functions for your layout projects.

## **WINNING CALCULATIONS**

The equation that determines your performance involves several variables. In a word, it is specific to you.

The same is true for your production equipment. It depends on the characteristics of your products, your location, your market and even your competitors. In short: your production strategy.

Do you need accumulation in order to protect your critical machine and increase line efficiency? Are you planning to invest in an Actis barrier solution, to label your bottles before filling or to palletize your empty bottles? Do you have to manage a wide range of different products, formats and container types each day?

Above all, we strive to understand this industrial project. In order to provide solutions to your equation Sidel air conveyors combine the best in equipment ergonomics and conveyor engineering for optimum line control.

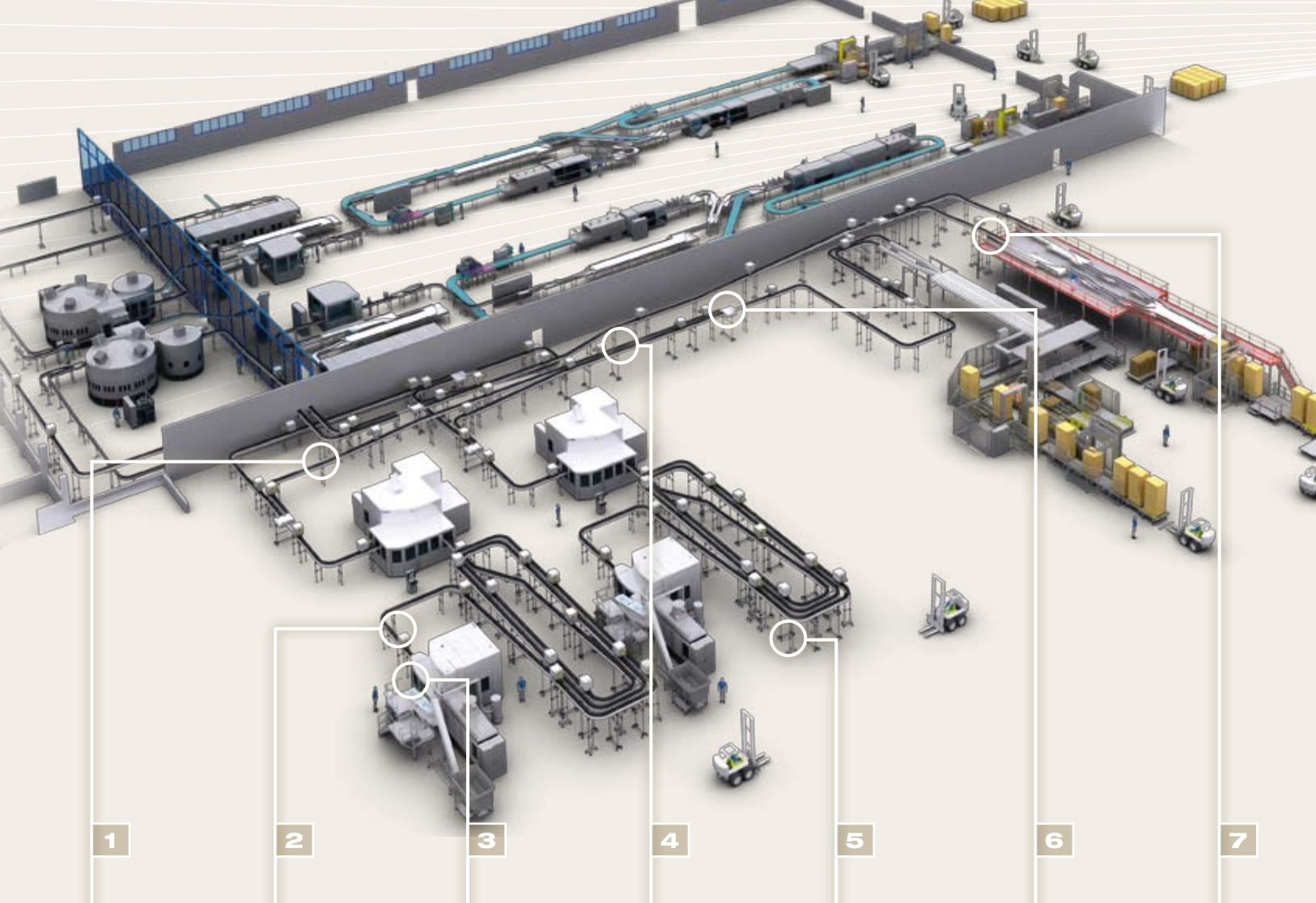
## **JUST A FEW DOZEN GRAMS...**

Because your container represents between 60 and 80% of your product cost at the end of the line: it is worth as much as the product it contains. The container allows you to get your product to your customers, wherever they may be, but it also enables you to showcase your product and to enhance your brand image.

Protecting your bottle from physical damage and from contamination is particularly important when the bottle is at its most sensitive and fragile, upstream from the filler.

This is the primary function of Sidel air conveyor systems: transporting the bottle as carefully as possible up to the filler.

This is done through precise control of the air flow rate and air purity, as well as through the smooth transport of the bottle neck. For multi-format production, it also involves quick changeover of the guides.



# Adapt to your environment

With a complete range of conveying modules



**1 PLENUMS**  
 Straight: from 300 to 3,000 mm  
 Curves: 15 to 90°  
 Up and downslopes: 5 to 15°



**2 BOTTLE EJECTION**  
 Machine protection  
 Silo feeding  
 Sampling



**3 BLOW MOLDER INTERFACE**  
 Quick format changeover



**5 SUPPORTS**  
 Floor support  
 Aerial support  
 Wall support



**6 SWITCHING**  
 Distribution: 1 → 2 or 3, 2 → 2  
 Grouping: 2 or 3 → 1

**7 HEIGHT ADAPTER**  
 Adjustable height for multi-formats

**4 BOTTLE TRAIN FORMATION**  
 Conveying  
 Switching

# Make your production strategies a reality

Thanks to an overall understanding of your goals

To respond to increasingly diverse consumption patterns, production types are becoming more complex: differentiation through packaging, expanded product ranges, product rotation, faster response to demand, cost optimization, etc. Each of these options has profound repercussions on production logic, processes, equipment and performance. In particular, they require equipment that can be adapted quickly to numerous format or production changeovers.

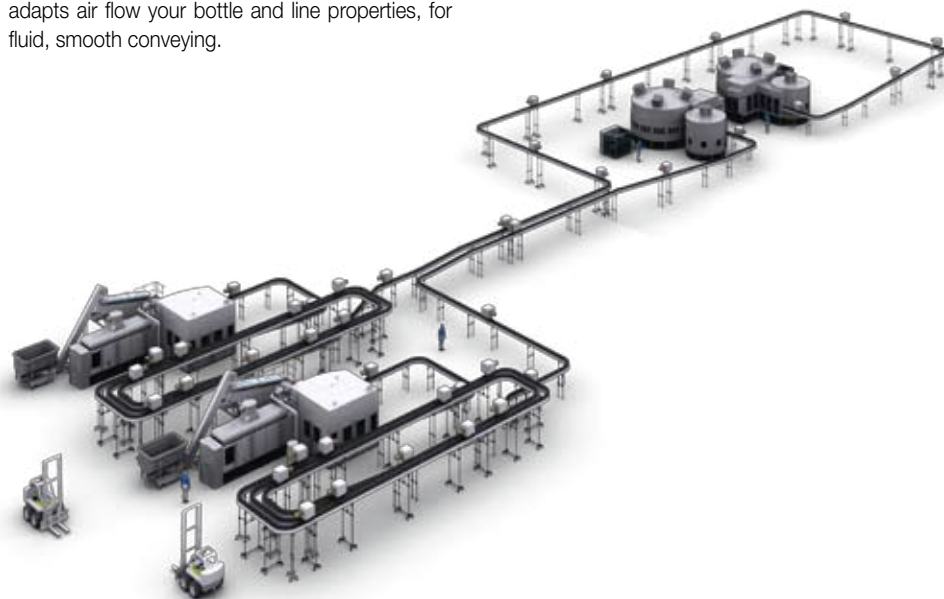
To best meet the needs of your industrial project, we develop a comprehensive approach to your production: to understand your production equipment in its entirety and to integrate multiple parameters that impact on performance.

We apply this approach with extra care when we design your conveying solutions, since they can transform the efficiency of your machines at the end of the line. To ensure optimal line control, Sidel air conveyors combine the best in equipment ergonomics and conveyor engineering.

## **CONVEYING, ACCUMULATING AND PROTECTING**

Do you need accumulation in order to protect your critical machine and increase line efficiency?

Accumulation time and performance are precisely calculated as a function of your production characteristics. Sidel's patented air infeed system adapts air flow your bottle and line properties, for fluid, smooth conveying.



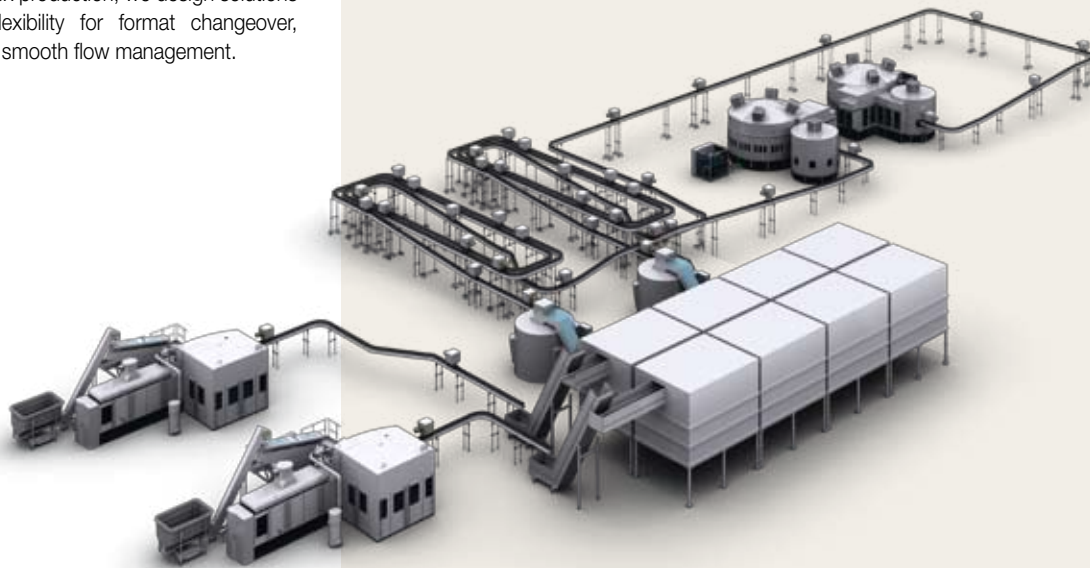
*Fans are automatically adjusted to machine speed and to conveyor occupation rate. Dry lubrication of the under-neck guide improves reliability, while providing a 20% decrease in electricity use by the speed drives.*

## MANAGING MULTIPLE PRODUCTS

Do you have to manage a wide range of different products, formats and container types each day?

For more complex production, we design solutions that promote flexibility for format changeover, ergonomics and smooth flow management.

*The flexible structure of Sidel's new patented switching system minimizes format changeover time, increasing efficiency by 20% at three-way output rates of up to 80,000 bottles per hour.*

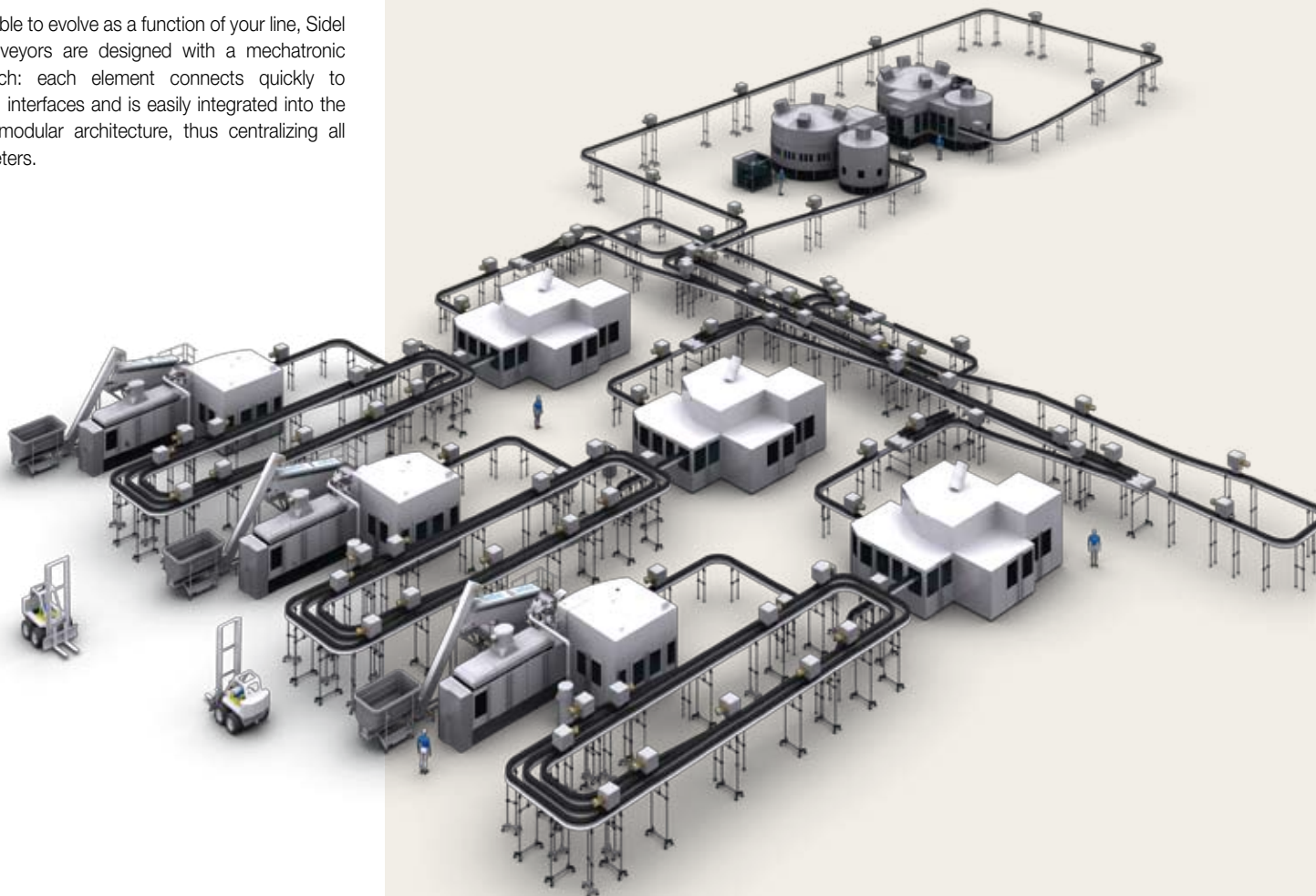


## CHANGING OR EXPANDING YOUR LINE

Are you planning to invest in an Actis barrier solution to improve your product's shelf life, to label your bottles before filling, or to palletize your empty bottles?

To be able to evolve as a function of your line, Sidel air conveyors are designed with a mechatronic approach: each element connects quickly to existing interfaces and is easily integrated into the PLC's modular architecture, thus centralizing all parameters.

*Because Actis™ lines require very long air conveyor distances and several switching points, Sidel solutions use sophisticated automation technologies: remote speed drives, Ethernet communication with each machine, high-performance HMI interface...*



# Respecting your product, Increasing your performance

Through a design that's focused on your needs

## Performance

Ergonomics every day



1

### TOP PLENUM

*Provides protection and easily accessible cable trays.*



2

### GROOVED ALUMINIUM SIDE PROFILE

*For installation of peripherals (support, cells, etc.).*



3

### UNDER-NECK GUIDING

*Clip-on and manually or automatically adjustable.*

## Quick format changeovers



4

### CONTROL PANEL

*User-friendly and preconfigured.*



5

### SIDE GUIDING

*Manually or automatically adjustable 2 or 3 positions.*



6

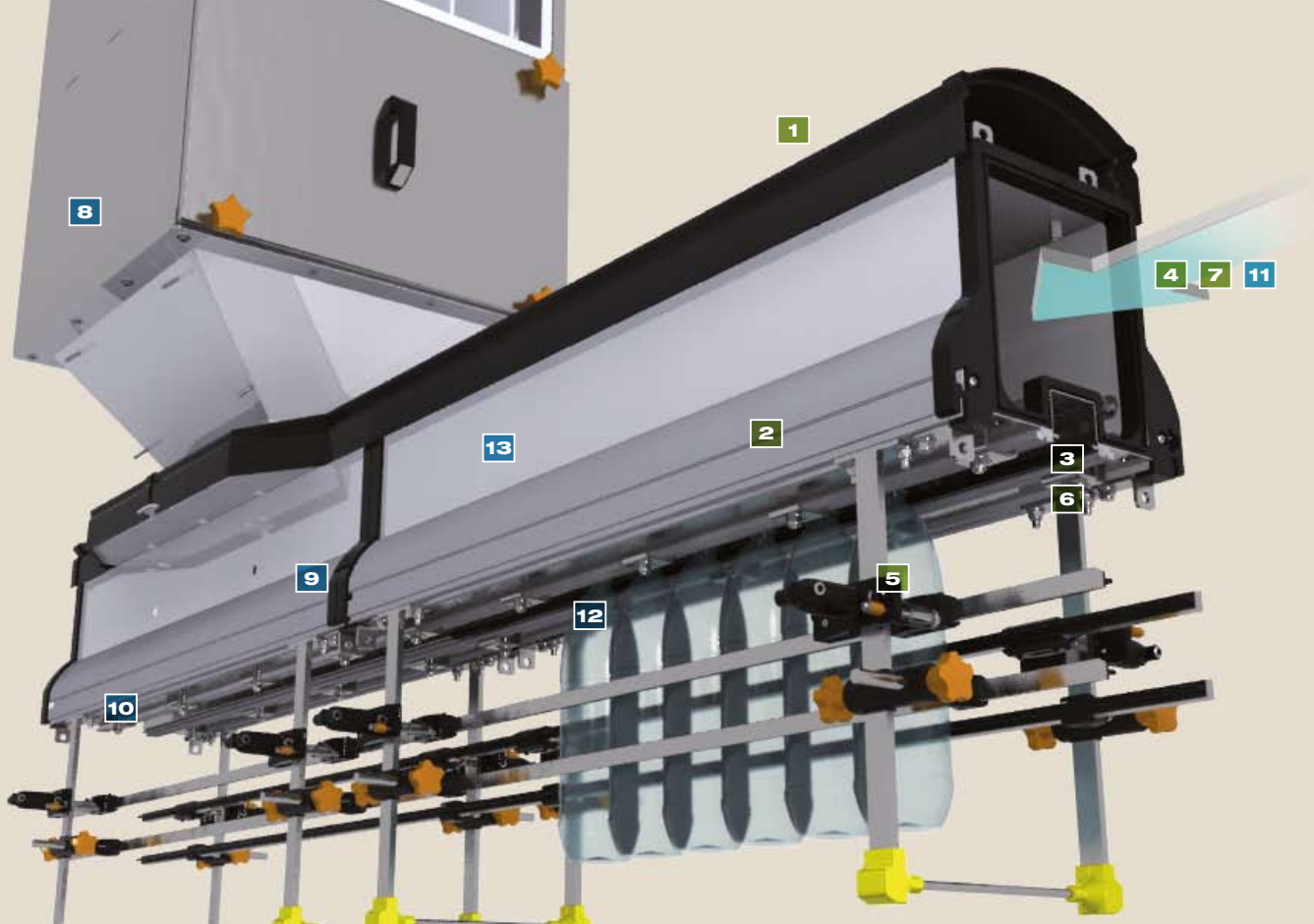
### DRY LUBRICATION

*Performance and energy savings.*

7

### AUTOMATIC FILTER COMPENSATION

*For constant pressure.*



## Hygiene

### Air control

#### OPACIMETRIC

High-efficiency filtration – 95 % at 0.5  $\mu\text{m}$ .

#### GRAVIMETRIC

Pre-filtration – 95% at 5  $\mu\text{m}$ .



#### HEPA FILTER

Absolute filtration – 99.99% at 0.5  $\mu\text{m}$ .

8

#### FILTRATION LEVELS

### Tightness control



9

#### INTER-BOX JUNCTIONS

For perfect tightness.

10

#### SIDE OR ALL-AROUND SHIELD COVER

To provide a confined atmosphere.

11

#### CONSTANT AIR OVERPRESSURE

For controlled air flow.

### Hygiene



12

#### REMOVABLE DECK

For inside cleaning.

13

#### DESIGN & MATERIALS

Selected for optimal hygiene.



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

Sidel Blowing & Services, hereinafter "Sidel", - Avenue de la Patrouille de France - F-76930 Octeville-sur-mer - RCS Le Havre B 424 623 759 - EN - As we constantly strive to improve production, Sidel reserves the right to modify its equipment. Therefore, this document cannot be considered as contractually binding. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the previous written approval of Sidel. All intellectual property rights, including copyright, are reserved by Sidel Blowing & Services or its associated companies. - © comme € 02 35 73 15 - Printed on recycled paper.