

E-CO FLEX LIDDING

CASE CLOSING WITH RIGHT-SIZE LIDDING MACHINES



IMA  **E-COMMERCE**
Advanced Packaging Solutions

E-CO FLEX LIDDING

Case closer with height reduction and right-size top lid application

THE E-CO Flex Lidding, **multiple footprint case closer with height-reduction and right-size lidding**, is the latest evolution in the E-CO FLEX series, designed to optimize E-Fulfillment and Intralogistics packaging processes through automation and sustainability.

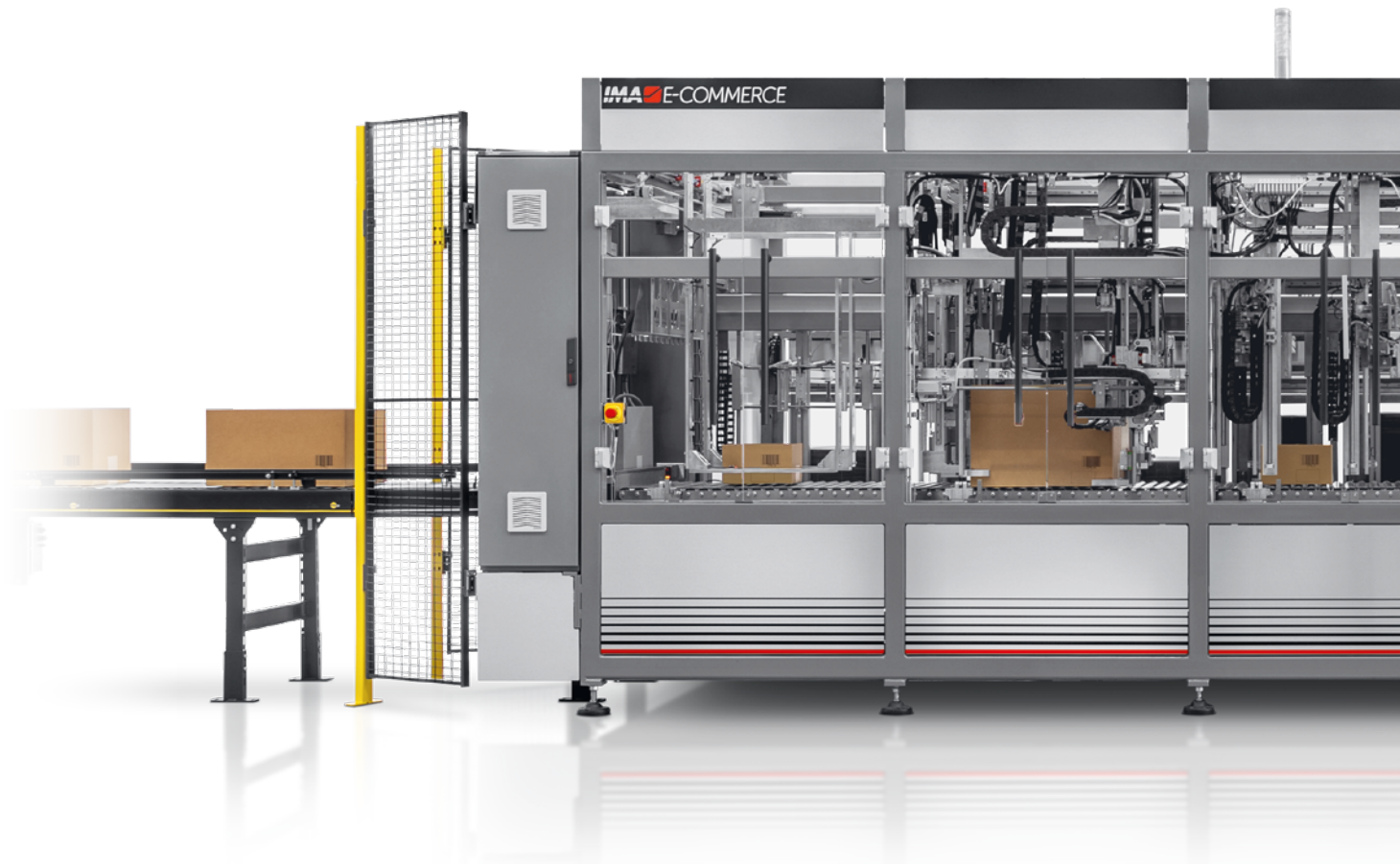
AUTOMATIC BOX SCANNING AND HEIGHT-REDUCTION

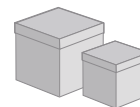
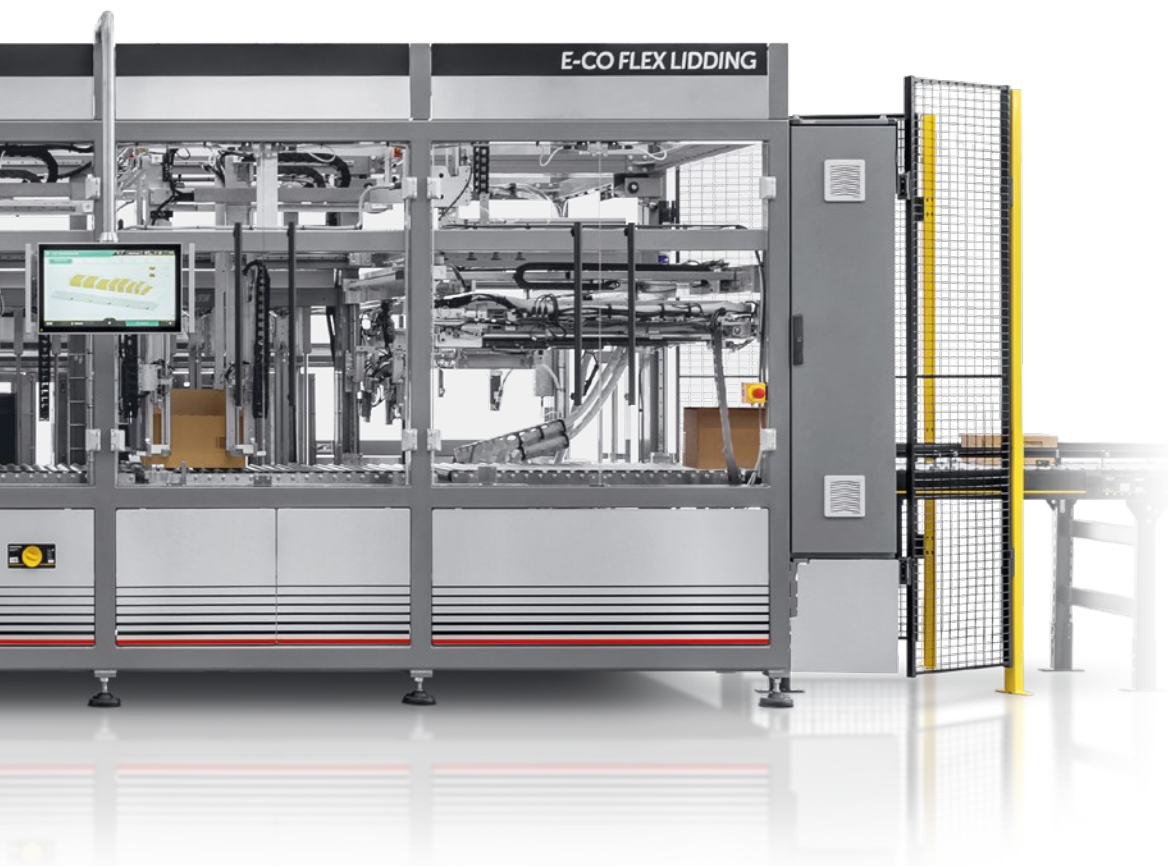
The machine analyzes each incoming box (whether **FEFCO 0200, tray, or auto-lock boxes**) by detecting its dimensions and identifying the maximum height of the products inside the box.

If necessary, the system can **reduce the box height down to a minimum internal height of 40mm**, without requiring any additional scoring lines and ensuring a perfectly tailored, product-optimized package every time.

In case a **SIOC** case is detected, the machine automatically bypasses it.

Compared to existing single-footprint solutions available on the market, E-CO FLEX LIDDING allows a better customization of the box size, reduction of void and saving on transport and corrugate cost, thanks to the use of multiple box footprints in combination with height-reduction.

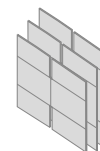




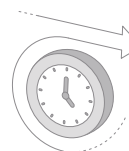
- **UP TO 10 BOX FOOTPRINTS AND LIDS**
for better right-size packing and higher void reduction, compared to single-footprint solutions.



- **FULL SYSTEM REDUNDANCY ENSURES UNINTERRUPTED PRODUCTION**
across the entire line, even if one of the machines temporarily stops.



- **SAVE ON CORRUGATE COST**
by using the right-size box for every order, instead of a limited selection of 1 or 2 footprints.



- **FUTURE-PROOF INVESTMENT**
If a new box mix configuration is required in the future, the machine can be easily adapted through a simple reconfiguration. This ensures your investment remains valuable and aligned with evolving operational needs.

LID MAGAZINE CUSTOMIZATION

The lid magazine is composed of cassettes similar to those used in the box forming modules of the E-CO FLEX family. The number and quantity of cassettes can be customized based on the usage percentage of each box size. For example, for high runners, multiple cassettes can be allocated to reduce the need for replenishment. Its flexible design maximizes capacity and allows the operator to **refill the magazine while the machine is running**, without causing any downtime.

LID SELECTION AND APPLICATION

Once height-reduction is executed, the system automatically selects the most suitable lid from the proper magazine (**up to 10 different lid sizes/artworks/cardboard flute**) and applies it by means of hot-melt glue, securing the package with precision and reliability.

The machine can process different type of lids:

- **Standard**
- With **tear strip** for easy-opening from the top
- With **tear strip and reseal tape** on one of the major flaps for returns



When combined with a **E-CO FLEX FORMING** multi-size case erector, **E-CO FLEX LIDDING** allows customers to use multiple box footprints on a single line.

PRODUCTION EFFICIENCY

If increasing volumes require the use of more than one line, adopting the E-CO FLEX FORMING and E-CO FLEX LIDDING solutions offers several advantages:

- **Operational redundancy**, ensuring continuous production even in the event of a machine stoppage. Thanks to the system's flexibility, all the units composing the line can handle all box formats and temporarily absorb production demand, maintaining seamless operations without disruptions.
- **Balance of the line workload**, ensuring that all units operate at the same throughput and accumulate the same number of boxes reduced in height or simply closed. This approach guarantees a smooth and efficient workflow, while enabling synchronized maintenance scheduling, reducing downtime, and extending the lifespan of the entire system.

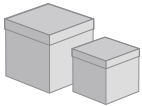


A PLATFORM TAILORED FOR EVERY PRODUCTION NEED

To better address the evolving needs of E-Fulfillment and Intralogistics operations, the E-CO FLEX LIDDING platform is available in two dedicated configurations:

- **an extended-range XL version**
- **a high-throughput version**

This evolution allows customers to select the performance profile that best matches their operational priorities, whether maximum flexibility or maximum speed, without compromising the core benefits of height reduction and right-size lidding.

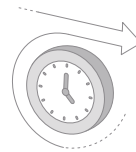


E-CO FLEX XL LIDDING – EXTENDED RANGE VERSION

The XL configuration is designed for environments where **flexibility and format variability** are critical.

Maintaining the full dimensional range of the original platform and capable of processing up to 10 different box footprints and lid sizes simultaneously, this version ensures consistent, guaranteed performance of **500 boxes per hour** in full random mode, regardless of format combination or cutting height.

This makes the XL version particularly suitable for multi-client logistics hubs, 3PL operations, or facilities managing complex SKU portfolios, where adaptability and operational predictability are as important as speed.



E-CO FLEX LIDDING – HIGH THROUGHPUT VERSION

The high throughput configuration is engineered for operations where **productivity** is the primary driver.

With a narrower but carefully defined size range (up to 640 x 430 x 420 mm) and the ability to manage up to 5 box footprints and lid formats, this version delivers outstanding performance levels of up to **720 boxes per hour** in full random mode.

It represents the ideal solution for facilities handling standardized box portfolios or limited format variability, where **maximizing hourly output** is essential to meet growing order volumes while maintaining right-size efficiency and height reduction capabilities.

A PLATFORM DESIGNED AROUND REAL OPERATIONAL NEEDS

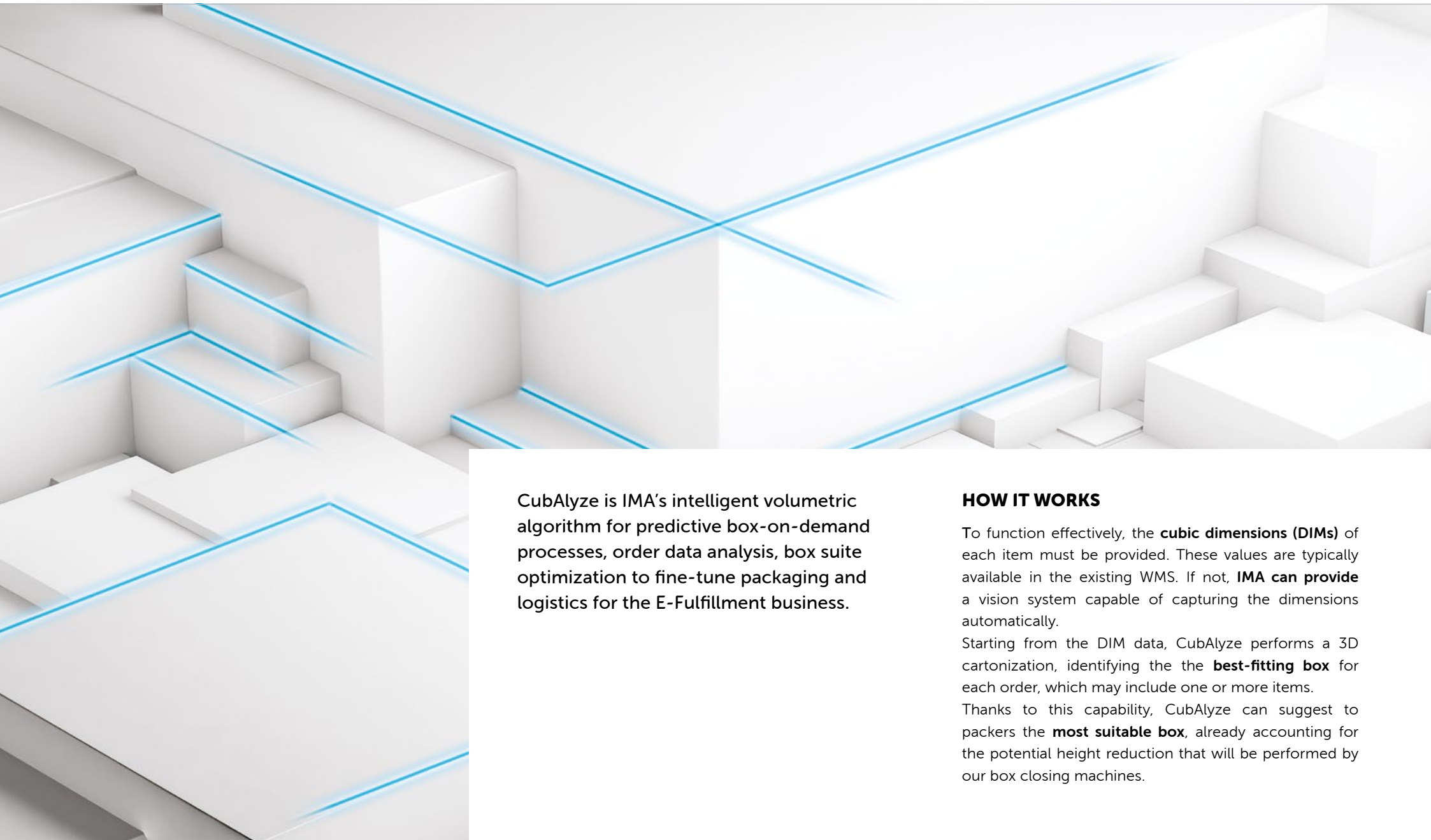
With the introduction of the two optimized configurations, customers can now select a clearly defined performance profile, prioritizing either maximum throughput or maximum flexibility with greater clarity, predictability, and alignment to their operational model.

E-CO FLEX LIDDING CONFIGURATIONS

	XL VERSION	HIGH THROUGHPUT VERSION
Operational focus	Maximum flexibility and wide box range	Higher throughput on narrower box range
Throughput (full random mode)	Up to 500 cases/hour	Up to 720 cases/hour
Minimum case size	7" x 6" x 3" (178 mm x 152 mm x 76 mm)	7" x 6" x 3" (178 mm x 152 mm x 76 mm)
Maximum case size	31.5" x 23.6" x 19.7" (800 mm x 600 mm x 500 mm)	25.2" x 16.9" x 16.5" (640 mm x 430 mm x 420 mm)
Internal minimum height after downsizing	1,6" (40 mm)	1,6" (40 mm) Further reductions below 40 mm can be evaluated on a project basis
Case Footprints/Lid formats	Up to 10	Up to 5
Height reduction & right-size lidding	✓ Included	✓ Included
Ships-in-own-container bypass (SIOC)	✓ Included	✓ Included
Machine dimensions	278,3" x 118,5" x 115,2" (7070 mm x 3010 mm x 2927 mm)	246,8" x 110,2" x 115,2" (6270 mm x 2800 mm x 2927 mm)
Cardboard processed	Single-wall/Single-flute Double wall/Double-flute	Single-wall/Single-flute Double wall/Double-flute

CUBALYZE

Cubic intelligence for smart E-Fulfillment



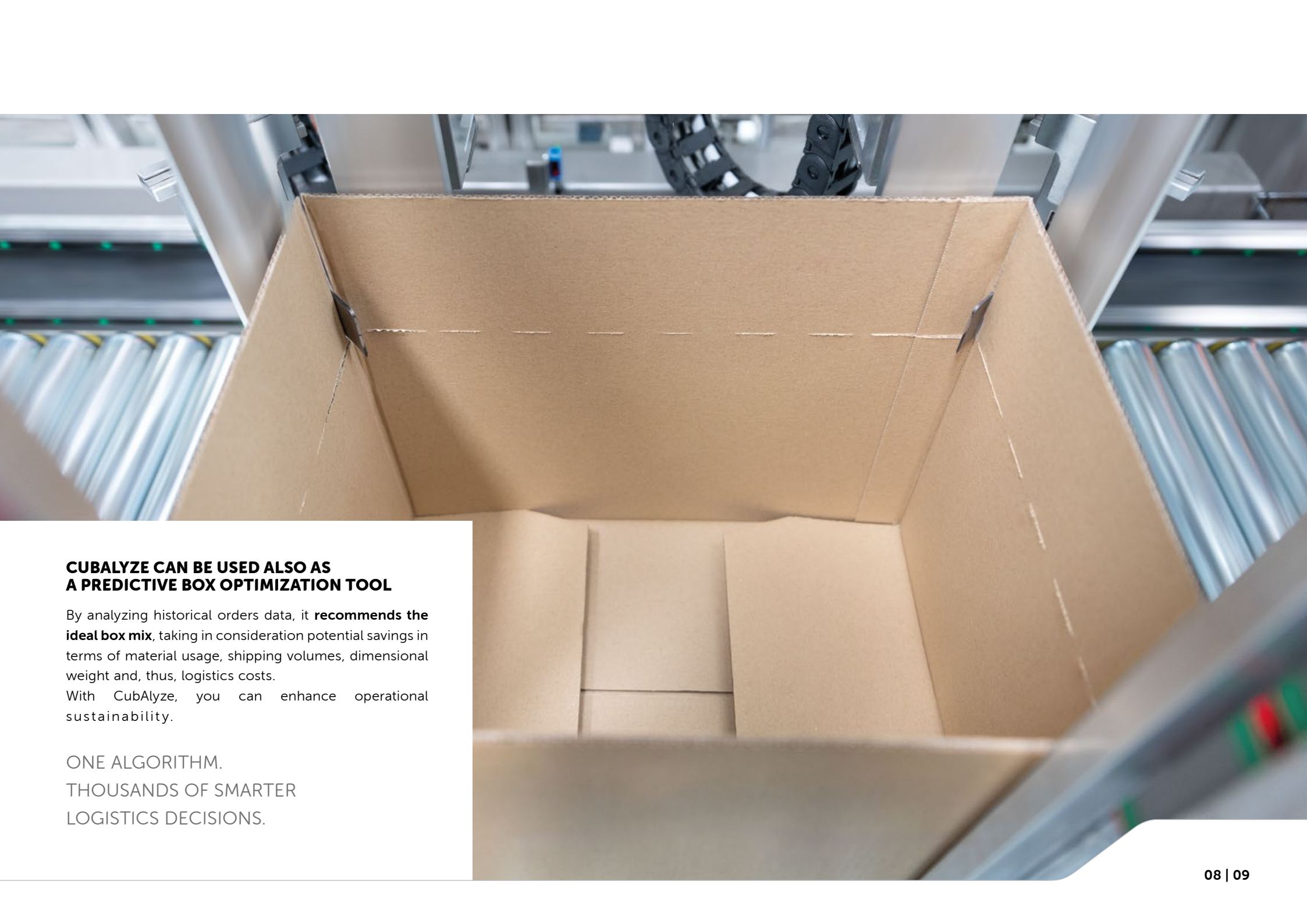
CubAlyze is IMA's intelligent volumetric algorithm for predictive box-on-demand processes, order data analysis, box suite optimization to fine-tune packaging and logistics for the E-Fulfillment business.

HOW IT WORKS

To function effectively, the **cubic dimensions (DIMs)** of each item must be provided. These values are typically available in the existing WMS. If not, **IMA can provide** a vision system capable of capturing the dimensions automatically.

Starting from the DIM data, CubAlyze performs a 3D cartonization, identifying the the **best-fitting box** for each order, which may include one or more items.

Thanks to this capability, CubAlyze can suggest to packers the **most suitable box**, already accounting for the potential height reduction that will be performed by our box closing machines.



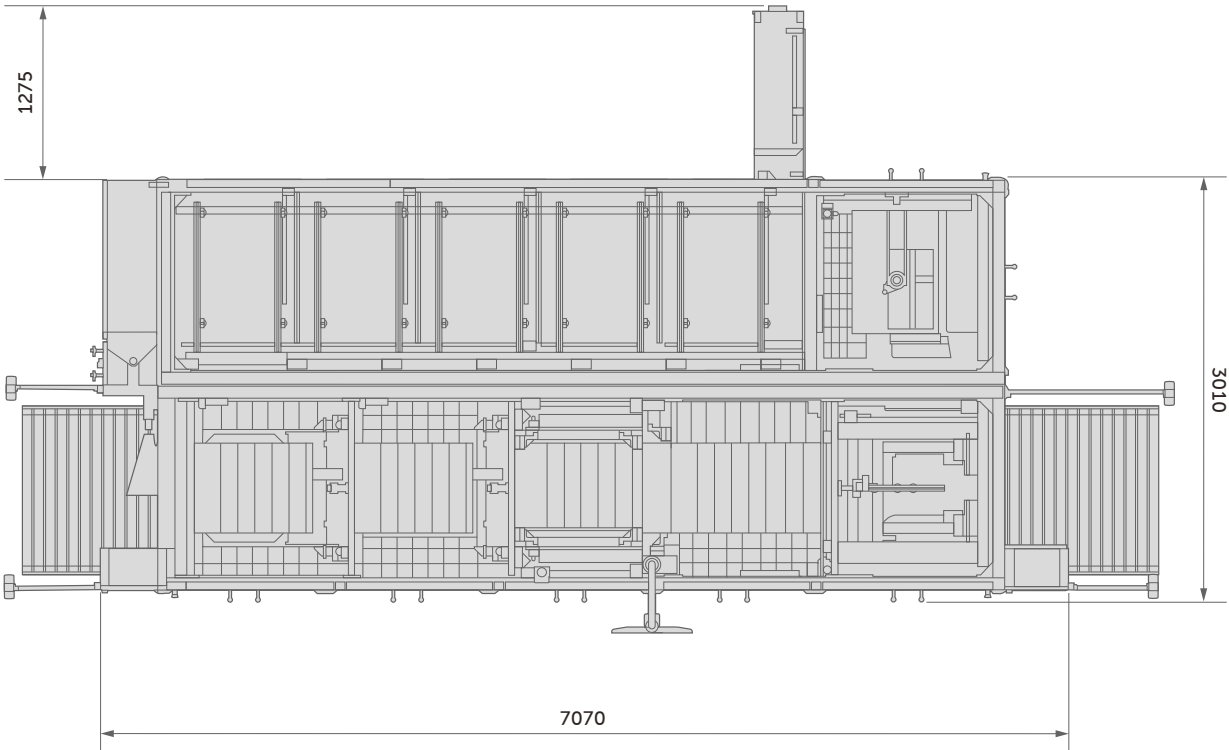
CUBALYZE CAN BE USED ALSO AS A PREDICTIVE BOX OPTIMIZATION TOOL

By analyzing historical orders data, it **recommends the ideal box mix**, taking in consideration potential savings in terms of material usage, shipping volumes, dimensional weight and, thus, logistics costs.

With CubAlyze, you can enhance operational sustainability.

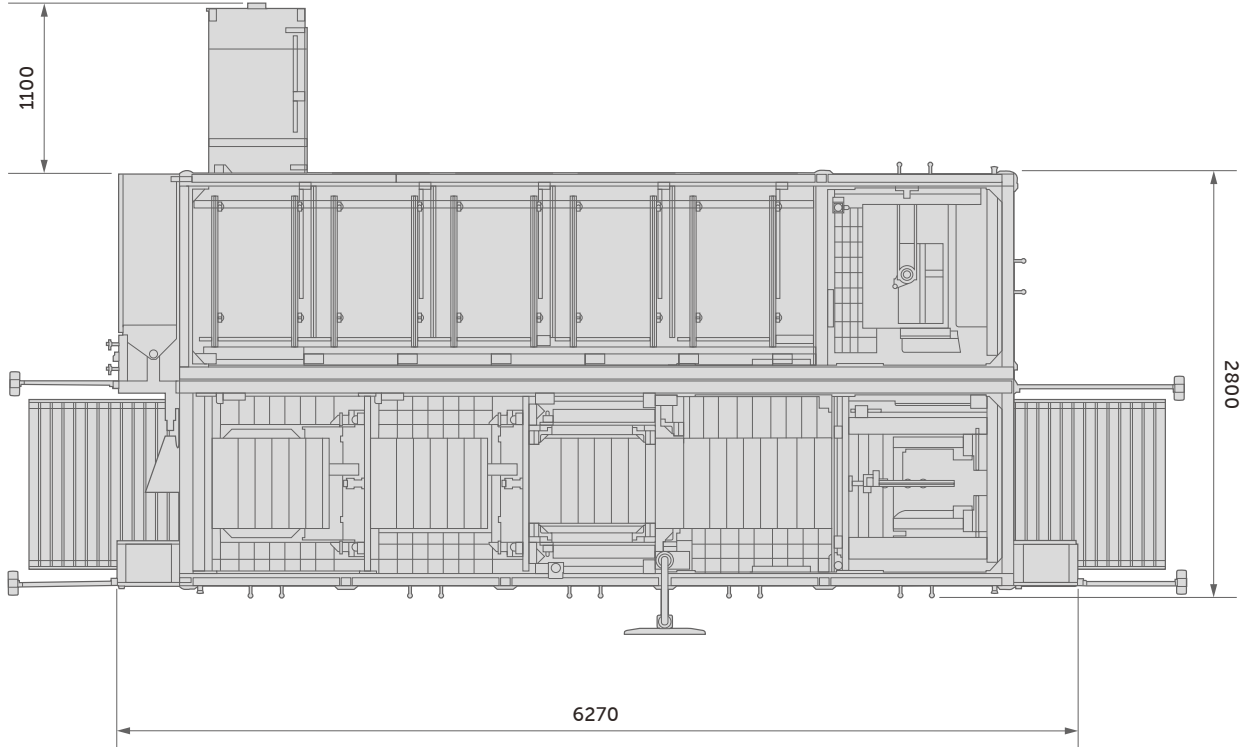
ONE ALGORITHM.
THOUSANDS OF SMARTER
LOGISTICS DECISIONS.

TECHNICAL DATA



E-CO FLEX XL LIDDING	
Machine dimensions	278,3" x 118,5" x 115,2" (7070 mm x 3010 mm x 2927mm)
Case throughput (full random mode)	Up to 500 cases/hour
Lid magazine	Up to 10 lid formats
Installed power	400V, 3PE, 50Hz 10 A 400V, 3N PE, 50 Hz 20 A 480V 60 Hz
Min case size	7" x 6" x 3" (178 mm x 152 mm x 76 mm)
Max case size	31.5" x 23.6" x 18.1" (800 mm x 600 mm x 460 mm)
Adhesive technology	Hotmelt glue
SIOCs bypass	Yes SIOC size limits match the machine's case size processing range.
Box type	FEFCO 0200 (HSC) Tray Auto-lock bottom cases

HIGH THROUGHPUT VERSION



E-CO FLEX LIDDING	
Machine dimensions	246,8" x 110,2" x 115,2" (6270 x 2800 x 2927 mm)
Case throughput (full random mode)	Up to 720 cases/hour
Lid magazine	Up to 5 lid formats
Installed power	400V, 3PE, 50Hz 10 A 400V, 3N PE, 50 Hz 20 A 480V 60 Hz
Min case size	7" x 6" x 3" (178 mm x 152 mm x 76 mm)
Max case size	25.2" x 16.9" x 16,5" (640 mm x 430 mm x 420 mm)
Adhesive technology	Hotmelt glue
SIOCs bypass	Yes SIOC size limits match the machine's case size processing range.
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