

THE ECO-BOX AS A SUSTAINABLE ALTERNATIVE:
ACTIVELY **SAVING ENERGY AND CO₂ EMISSIONS**

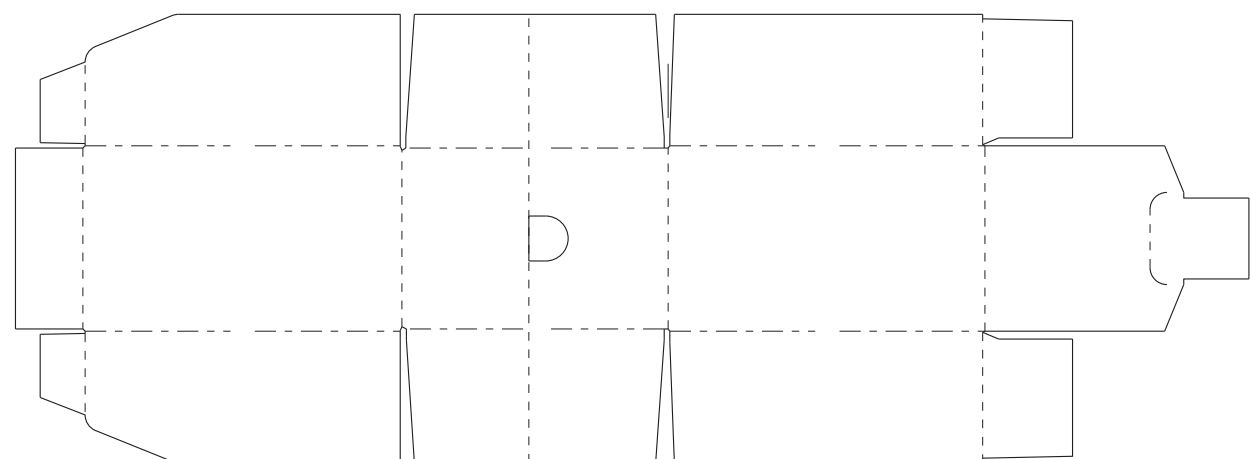
The production advantages: saving packaging material, reducing intralogistics and more process stable packaging of bags, flowpacks and boxes - for an attractive ROI and an ecological excess profit.

The advantages at a glance:

- > Up to 25 % less blank wastage
- > More flexibility, less format changes
- > Loading shelf-ready cartons and other cardboard packaging in one machine
- > Short changeover times
- > Better pallet utilization
- > Performance: up to 30 bags/10 cartons per minute, upscalable
- > 40 centimeters of carton depth
- > Low maintenance costs
- > Camera-supported troubleshooting
- > Instructions for format changes via video tutorial
- > Preventive maintenance with TIM (TRAPO Intelligent Managementsystem)

Resource-saving carton blank

Up to **25 % savings**
per cardboard Compared to cartons
with standard tray lids



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Compared to cartons with standard tray lids,
savings up to 25 %
per cardboard!



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INNOVATIVE SHELF-READY PACKAGING
SAVING UP TO 25% OF RAW MATERIAL
WITH THE ECO-BOX

TRAPO | ECO-BOX PACKAGING SYSTEM (EPS SERIES)

SHELF-READY PACKAGING: A TREND WITH MANY ADVANTAGES FOR ATTRACTIVE PRODUCT PRESENTATIONS

More and more single-family households revert to the offer of the handy bags – for example with convenience products or pet food. The retail industry appreciates their advantages as well: quickly opened, the products are presentable in a clearly laid out box – inconvenient filling of single products is dispensed with. TRAPO engineers put the idea to the test. The result is an innovative, highly flexible generation of machines that convinces especially with its sustainability.

The advantages:

- Whereas the fork grippers of the competitors' machines shove several product bags into the carton at a time, TRAPO uses a pick and place solution to suck in each product separately and place it carefully in the carton.
- The type of packaging itself creates the benefit: with customary two-piece packages, the lid goes right in the bin – the layout of the Eco-Box relinquishes the lid and has less waste. This is where up to 25 % of carton material can be saved!
- Alternative wrap-around formats have a tear-up perforation that leaves behind an unclean cut when opening. Unlike the Eco-Box: The tear-up surface is clean, the perforation invisibly averted from the customer's view.

Due to a modular design, the Eco-Box Packaging System can be adapted to the customer's individual needs. Size-dependent of performance classes: up to 30 bags and 10 cartons per minute, from 30 bags on upscalable.

Each product is picked carefully and positioned individually

While with competitors, products are frequently shoved parallelly into the collateral carton, TRAPO plays it safe: via pick and place solution, each product is picked up carefully by the suction gripper and perfectly positioned.

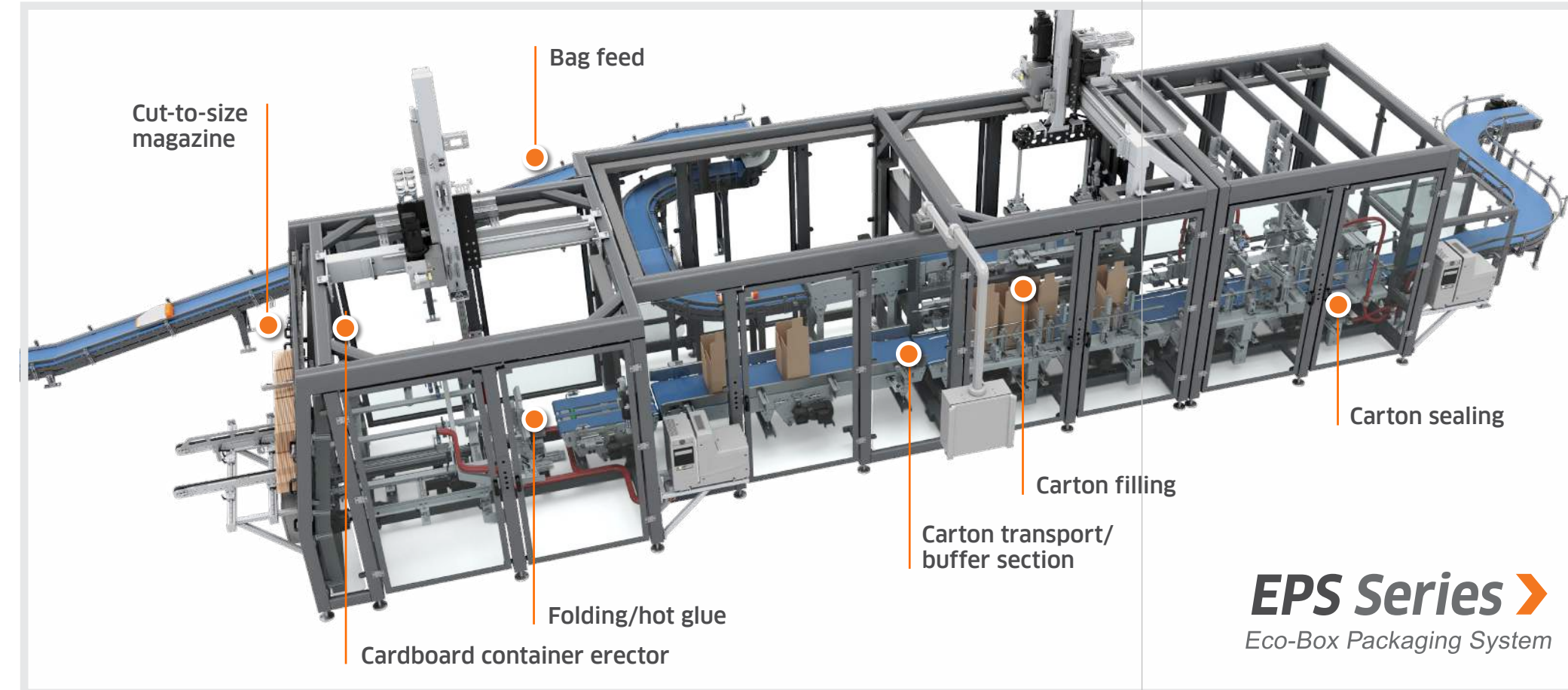
To fill the cartons, an area gantry picks up the waiting bags from the acceptance lanes and transports them to the ready-for-loading cartons. After picking up the bags, the synchronization of the two subsequent bags follows. A rotary lift unit mounted at the gantry turns the sucked up bags synchronously by 90° to align them in accordance with the cartons. As soon as the bags reach the positions above the cartons, they are lowered to their exact position in the carton by the gantry.

The loading procedure is repeated four to six times until the carton is entirely filled.



➤ Two grab heads with suckers act parallelly.

THE INNOVATIVE CONCEPT OF ONE MACHINE FOR SHAPING, FILLING AND SEALING CARDBOARD PACKAGING

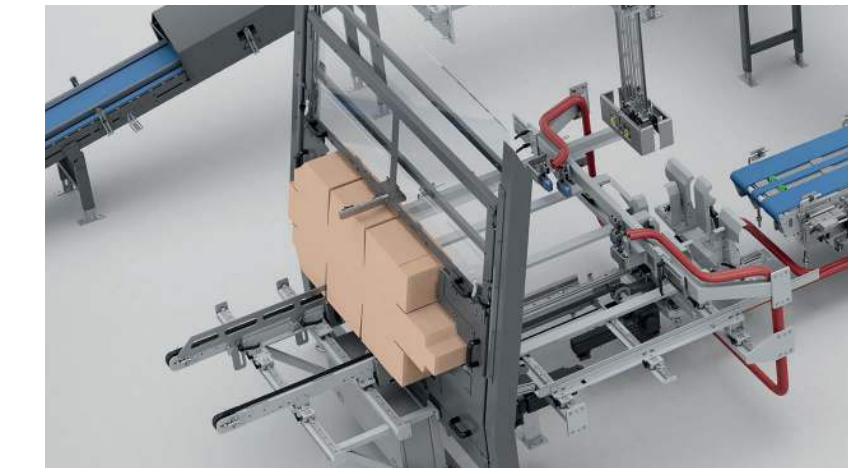


THIS PLANT FITS OPTIMALLY INTO ANY GIVEN SURROUNDINGS

Due to its high flexibility, the Eco-Box Packaging System fits into any given production setting.

Depending on the given production hall layout, the erector can also be placed separately from the Eco-Box Packaging System in another spot and randomly be connected via conveyor technique.

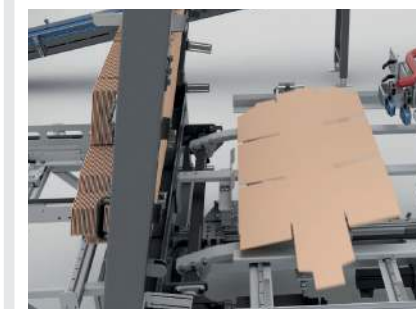
The stack stores a carton pile of approximately 350 blanks. The blanks are folded individually into cartons, glued, erected and placed on the conveyor belt.



➤ The first part of the Eco-Box Packaging System can be separated demand-oriented, space-independently positioned at a random spot and connected via conveyor technique.

The processing steps

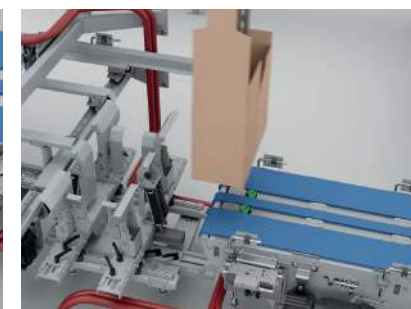
SHAPING



The carton blanks are loaded into a blank store (1 meter long).

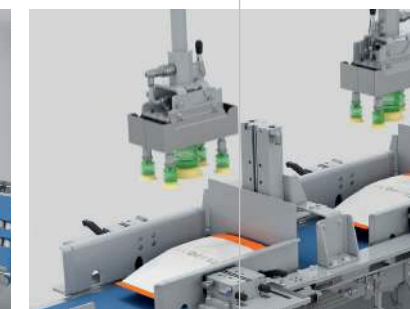


A folding matrix shapes the carton, glues and grouts the glue via stamps underneath the gantry.



The erected carton is positioned on the inlet belt conveyor for filling.

FILLING



The product is fed into the filling and sealing machine horizontally.

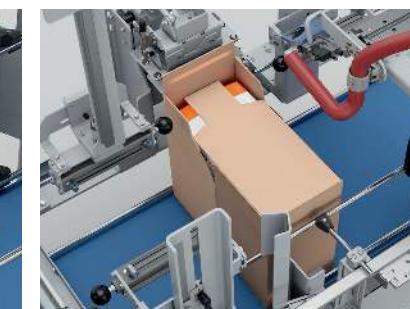


A pick and place robot (delta, gantry or kinematics) carefully picks up the products.

SEALING



The product is kept flat, turned by 90° and put into the carton.



The carton is sealed with hot glue.