

Carton meets bottle.
combidome



SIG Combibloc

"You know beverage cartons.
And you know beverage bottles.
But you've not yet heard of
combidome."



With *combidome*, we're bringing you something that's totally unlike anything you've ever seen on the supermarket shelf. It combines the best features of a carton pack with the best features of a bottle – guaranteeing exceptional differentiation for any beverage.

Thanks to its shape, stability and smooth pouring action, *combidome* is easy to handle, like a bottle, while at the same time offering all the proven and unrivalled benefits of a carton pack in terms of product protection, environmental and economic considerations: benefits that are equally important for manufacturers, retailers and consumers.

With *combidome*, SIG Combibloc has created a carton pack that offers a new dimension in differentiation and convenience and brings with it all the proven environmental benefits of the beverage carton.

A handwritten signature in black ink, appearing to read 'Markus Boehm'.

Markus Boehm,
Chief Market Officer, SIG Combibloc

Carton. Bottle. Different.

combidome

It looks like a bottle; it is convenient like a bottle. And it protects beverages like a carton pack. In addition, it offers all the environmental benefits that make the carton so unique. The newcomer that has a bottle's good looks and really sets itself apart from all other types of beverage packaging is *combidome* from SIG Combibloc – the carton pack that is shaped like a bottle.

The carton composite from which the entire carton pack is made, from the base to the eye-catching yet practical dome, contains around 75 % paper board which is made from the renewable raw material wood.

The slim, elegant package combines the best features of a bottle and the best features of a carton pack, making it a real attention-grabber. And the moment you hold it in your hands, the favourable impression created by its outstanding visual features is reinforced by the exceptionally easy handling.





Revolutionary convenience. Evolutionary technology.

combidome

combidome is exceptionally convenient and user-friendly. The slim, sturdy carton pack sits comfortably in the hand.

The single-action domeTwist screw cap is positioned in the centre of the package's top, and is easy to open. At 28 mm, the inner diameter of the closure is particularly large, ensuring smooth pouring and enabling consumers to drink conveniently straight from the carton pack.

Obviously, we have also given *combidome* all the great features that make the aseptic carton pack so popular. The composite structure, the sleeve system and the filling system are based on our robust, stable *combibloc* system solution, which proves its worth a billion times over, year after year.

Inside the *combidome* filling machine, we have incorporated additional system components that make *combidome* an exceptional carton pack. They guarantee superior product characteristics, and ensure your beverages of a successful market presence – today, and tomorrow.





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Perfectly protected. Long life.

combidome

In *combidome*, designed in the initial stage as a packaging solution for non-carbonated soft drinks, aseptically filled beverages are hygienically packaged and securely protected from light and air. When stored for long periods of time, flavour or colour of the product is not impaired. Nutrients and vitamins in the beverage are retained for a long time, without the use of preservatives – and as long as the carton pack is left unopened, there is no need for refrigeration.

The protective composite structure of the *combidome* carton pack is made primarily of raw paperboard and polymers. Carton is the main component and gives the package stability. The inner polymer layers form a liquid barrier for the beverage; the outer layer keeps moisture out. Added to this is a thin aluminium layer, which protects the product from light, oxygen and external odours.

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Renewable. Sustainable.

combidome



The mark of
responsible forestry

With their high content of the renewable raw material wood, carton packs are proven to be among the most environmentally friendly packaging solutions for long-life beverages. The same applies for *combidome* carton packs as an independently verified, ISO-compliant life-cycle assessment conducted in 2012 has shown. Over the full life cycle, for example, *combidome* carton packs generate 41 per cent less CO₂, use 51 per cent fewer fossil resources, and consume 33 per cent less primary energy than disposable PET multilayer bottles; when compared to disposable PET monolayer bottles, these figures are 27 per cent for CO₂, 42 per cent for fossil resources and 20 per cent for primary energy.

Compared to disposable glass bottles, *combidome* generates 75 per cent less CO₂, uses 66 per cent fewer fossil resources, and consumes 60 per cent less primary energy.

To manufacture *combidome*, we use only raw cardboard made of pulp from trees harvested in FSC®-certified forests (Forest Stewardship Council®) or other controlled sources. This means we also offer *combidome* carton packs displaying the FSC label, which makes it easier for the environmentally conscious consumer to make a purchase decision at point of sale.

Just like all other carton packs from SIG Combibloc, *combidome* and its closure are fully recyclable, and are compatible with all national recycling and waste management systems. *combidome* can be disposed of and recycled as a single unit.





Flexible. Fit for the future.

combidome

The *combidome* filling machine offers manufacturers in the food and beverage industry the decor, volume and product flexibility that people have come to expect from SIG Combibloc filling machines. A change of carton decor can be implemented without interrupting the production process and with no wastage at all. All you need to do is switch the carton sleeves in the magazine of the filling machine.

And a volume change also takes just a few minutes, offering manufacturers the attractive option of positioning products in volumes that are tailored precisely to the intended target group.

Flexible. Added value as standard.

combidome

And when it comes to product flexibility, the *combidome* filling machines from SIG Combibloc provide the basis for manufacturing a vast array of product variants that can have a range of viscosity levels. In addition, all *combidome* machines are set up for a *drinksplus* kit, which can be used to fill innovative *drinksplus* products with 'perceptible' added value in the form of extras such as pieces of real fruit and vegetables or cereal grains.





All-round benefits. The sleeve system. *combidome*



Our customers receive the packaging material for *combidome* in the usual way, as finished, flat carton sleeves. The sleeves are pre-printed with the customer's ordered decor and precisely marked with fold lines, which will later give the carton pack its characteristic *combidome* shape. We have already sealed the carton blanks into sleeves, meaning that with *combidome* too, sealing the longitudinal seam is a process step our customers do not need to worry about. That means additional aseptic safety.

All four display surfaces, and the distinctive carton dome, are fully printable and thus available for use to enhance the layout of the carton design. In this way, *combidome* differs markedly from conventional beverage bottles, whose design possibilities are mostly limited to narrow labels or banderoles. The scope this offers makes it possible for manufacturers to communicate information and to attract consumers' attention to the product – the design on the printed surface becomes the perfect complement to the unusual shape.

The cardboard for the *combidome*-packs is printed in up to six colours using the gravure process. This printing process guarantees particularly high-quality printed images.

Proven technology, improved upon. The filling machine technology. *combidome*

The *combidome* filling machine, which is capable of filling 12,000 *combidome* carton packs per hour, is based on the dependable, robust filling machine technology from SIG Combibloc. And with *combidome*, a carton pack has appeared on the market that really sets itself apart from all other beverage packaging solutions.

The *combidome* package consists of two sections: a carton body, which is composed of carton composite from the base to the dome and the domeTwist screw cap. Inside the *combidome* filling machine, the two components are assembled into the finished carton pack, aseptically filled and securely sealed.



Just upside down. The filling process.

combidome

The domeTwist closures are transferred via an air conveyor into the four-track mandrel wheel area of the filling machine, and each closure is placed on a separate mandrel. The *combidome* carton sleeves, each already sealed along the longitudinal seam, are transferred from the carton magazine to the mandrel wheel. One sleeve is placed on each mandrel. Next, the top edge of the carton sleeve is activated by hot air and then firmly sealed to the base plate of the closure, which has also been pre-heated.

In the next step, the flaps of the dome are sealed to the carton, which is now open only at what will later form the carton base. The carton packs leave the mandrel wheel area upside down and move into the aseptic zone of the filling machine. There the beverages, which have already been sterilised in UHT units, are filled into the open, sterilised carton packs in four stages. The filling nozzles are angled diagonally into the corners of the carton packs. This keeps foaming of the beverage to a minimum, creating a very low-oxygen filling process, which is beneficial for product quality. The carton base is then ultrasonically sealed.

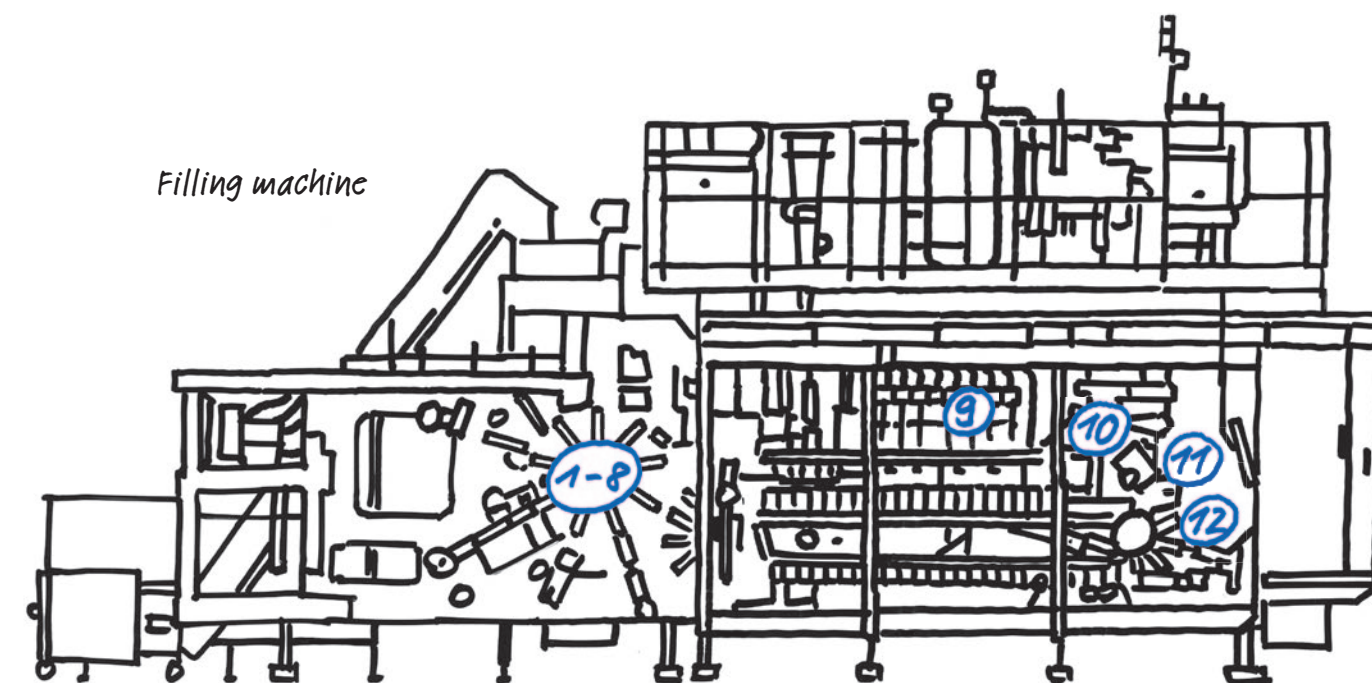
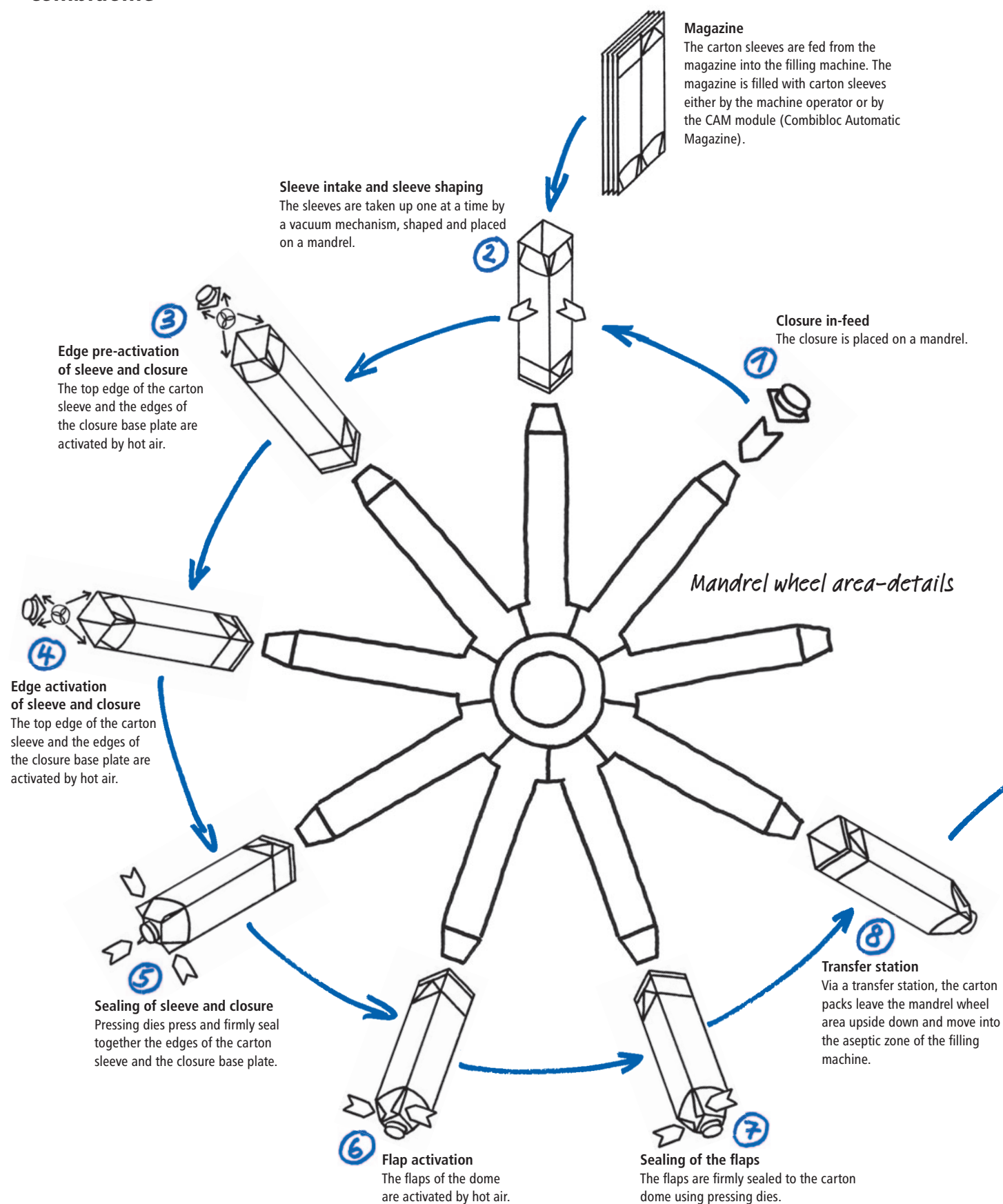
The carton pack is now firmly sealed, and the product is securely protected. In the next step, the bottom flaps are pre-heated by hot air and sealed to the base. The carton packs are then placed upward and ejected from the filling machine. Downstream, the aseptically filled *combidome* carton packs are given the secondary packaging requested by the customer.



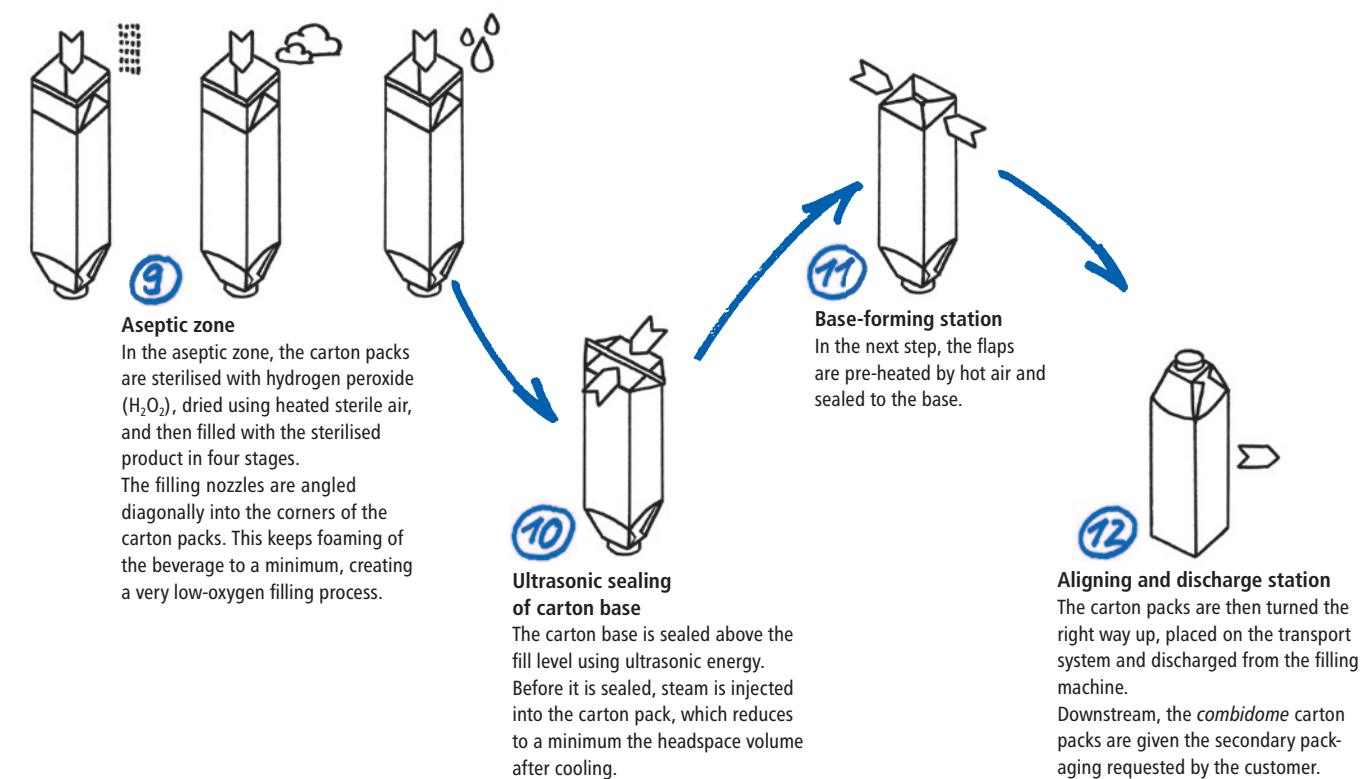
At a glance – the filling system

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For any further questions or comments,
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