



## Press Release

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drinksplus: a bit ahead of the game with new system concept

### **Experience added value – bit by bit**

**June 2009.** Globally, the food industry is searching for product innovations that have the potential for success and offer added value – for consumers, for producers and for retail. SIG Combibloc has developed *drinksplus* – a solution that makes the added value of a product ‘perceptible’, bit by bit, adding natural ‘extras’ such as pieces of real fruit and vegetables or cereal grains to the drinks. The *drinksplus* concept opens the way to completely new product categories that are right in line with the current consumer trend for ‘health and wellness’. Now it is possible for products containing up to ten per cent particulates to be filled in aseptic carton packs using standard SIG Combibloc filling machines for liquid dairy and NCSO products – with individual bits of up to six millimetres in length and diameter. *drinksplus* opens up a wealth of trend products, which can be turned into reality quickly and cost-effectively.

Worldwide, the consumer trends ‘health and wellness’ are the main drivers for new product developments in the food industry. Naturalness and purity are the key aspects that consumers look for when selecting value-added products. With this in mind, SIG Combibloc commissioned an international consumer study confirming that for consumers, claims of added value in a beverage are given much greater credibility if the product contains pieces of real fruit or vegetable than would be the case with a drink that did not contain real fruit pieces.

The study also revealed that even adults prefer to drink products with perceptible added value qualities through a straw. Drinking through a straw allows the consumer to fully experience the unique texture of products containing bits of fruits or cereal grains, creating a completely new drinking experience.

This is where the *drinksplus* concept from SIG Combibloc comes in, creating a completely new product category: real fruit or vegetable or even cereal grains are added to ambient milk mix and NCS D products filled in carton packs.

When considering new product concepts, it is not just a matter of coming up with innovative ideas but it is also necessary to think about technical feasibility. SIG Combibloc succeeded in bringing the liquid and solid product components together, on a continuous basis as part of the routine filling process and filling the products into carton packs under sterile conditions using standard machines for liquid dairy and NCS D products.

In cooperation with the DoehlerGroup (a leading international manufacturer of fruit juice concentrates, fruit compounds, blends, bases, ingredient systems, emulsions, flavourings and colourants for the beverage, dairy and ice cream industries), SIG Combibloc has developed a selection of innovative drinks containing particulates for the *drinksplus* concept. These include, for example, smoothies with bits of pineapple and orange refined with pepper, and yoghurt drinks with pieces of mango and pineapple. The recipes tested leave plenty of scope for further creative drinks concepts to enhance the product portfolio of any food manufacturer.

To offer complete solutions that incorporate product handling and process technology before the filling process, SIG Combibloc works closely with other experienced and globally active companies. One of the partners is GEA TDS. GEA is a successful technology company that concentrates on special purpose machinery – focusing on process technology and components, as well as plant engineering and construction.

In close cooperation, the companies developed three basic technical options for implementing the *drinksplus* concept: They can be implemented using standard SIG Combibloc filling machines for liquid dairy and NCS D products. Each of these basic solutions for technical implementation can be tailored to existing manufacturing facilities and adapted to the desired product concept, objectives, investment volume and manufacturing capacity. Only product-related adjustments need to be made to the filling machine.

### **Single heat treatment: perfect solution for viscous products**

With the first basic solution for processing and filling the innovative *drinksplus* products, the liquid component and the particulates are mixed and then heat-treated in one tubular heat exchanger. This method is especially suitable for viscous drinks like smoothies in which the bits are evenly distributed.

### **Separate heat treatment for less viscous products**

When heat treating the liquid component and the solid particulates separately, less viscous products such as milk mix drinks or fruit juice drinks with pieces of fruits, vegetables or cereals can also be aseptically filled into carton packs from SIG Combibloc. There are two possible solutions. In the first option, the liquid is processed in a standard heat exchanger while the supplier of the solid particulates delivers the aseptically filled bits. They are delivered in a carrier liquid in mobile aseptic barrels which are docked to the filling machine. The pieces are added evenly into the product flow.

In the second option, the liquid component and the solid particulates are treated on-site at the producer's plant in two separate heat exchangers. This solution for filling new product concepts containing extra bits offers the most versatile range of possibilities for mixing and filling innovative success formulas containing healthy bits. After the heat treatment, a dosing unit is used to bring the product components together in a mixing station before they are filled into the aseptic carton packs – using standard filling machines from SIG Combibloc.

### **Flexible filling technology opens the way**

The flexible filling technology from SIG Combibloc opens the way for new product concepts that combine a drink and the natural bits. For more than 20 years, SIG Combibloc – a leading systems manufacturer for aseptic carton packs and the corresponding filling machines – has been leading the way in the aseptic filling of food products with particulates into carton packs. SIG Combibloc extended this expertise to adding nutritious bits to liquid dairy products and non-carbonated soft drinks as well - opening the way for developing innovative new products.

The sleeve system from SIG Combibloc makes it possible: The packaging sleeves produced at SIG Combibloc's production plants are individually shaped, sterilised and filled on filling machines from SIG Combibloc at the premises of the dairy or fruit juice producer. After filling, the carton pack is ultrasonically sealed above the filling level and not through the product – preventing fibres or particulates from becoming trapped in the sealed seam.

To implement the *drinksplus* concept, standard SIG Combibloc filling machines for liquid dairy and NCSD products are simply fitted with a new upgrade set. The easy-to-install 'Particulates Upgrade' equipment includes e.g. special valves and filling nozzles

developed to provide optimal product flows and tailored to fill innovative drinks containing particulates.

Single-serve drink packs are continuing to grow in popularity around the globe as consumers are demanding on-the-go products. SIG Combibloc meets these demands, offering a wide selection of single-serve carton packs in a broad range of volumes. With combibloc *Mini* and combibloc *Small* as well as with the corresponding *combifit*-formats, food manufacturers have plenty of opportunities to position their drinks *plus* products with perceptible added value. The drinking straws for drinks *plus* are up to eight millimetres in diameter and make drinking the innovative products with natural bits a very special experience.

Diana Bechtold and Norman Gierow, Market Segment Managers at SIG Combibloc: “The unique competence of SIG Combibloc to fill particulates opens the way for new product ideas with natural bits that create exciting drinking experiences. And these new ideas are exactly what the consumer demands. Conventional mealtimes are becoming a thing of the past, with ‘proper’ meals often replaced by snacks. The nutritious little extra bits give the products the character of a healthy snack. This makes value-added drinks in convenient packaging the perfect companions for people on the go. With their fully printable display surfaces, carton packs are perfect for communicating the added-value characteristics of new products, making them stand out on the shelf.”

**Caption (drinks *plus*):**

Globally, the food industry is searching for product innovations that have the potential for success and offer added value – for consumers, for producers and for retail. SIG Combibloc has developed drinks *plus* – a solution that makes the added value of a product ‘perceptible’, bit by bit, adding natural ‘extras’ such as pieces of real fruit and vegetables or cereal grains to the drinks.

**Photo: SIG Combibloc**

**Caption (Straw):**

An international consumer study confirms that for consumers, claims of added value in a beverage are given much greater credibility if the product contains pieces of real fruit or vegetable than would be the case with a drink that did not contain premium fruit pieces. The study also revealed that even adults prefer to drink products with perceptible added value qualities through a straw. Drinking through a straw allows the consumer to fully experience the unique texture of products containing bits of fruits or cereal grains, creating a completely new drinking experience.

**Photo: SIG Combibloc**

**Caption (Splash-Milk):**

With the *drinksplus* concept, it is possible to fill products containing up to ten per cent particulates in aseptic carton packs using standard SIG Combibloc filling machines for liquid dairy and NCS D products – with individual bits of up to six millimetres in length and diameter. *drinksplus* opens up a wealth of possible trend products, which can be turned into reality quickly and cost-effectively.

**Photo: SIG Combibloc**

*SIG Combibloc is one of the world's leading system suppliers of carton packaging and filling machines for beverages and food. In 2008 the company achieved a turnover of 1,249 million Euro with around 4,100 employees in 40 countries. SIG Combibloc is part of the New Zealand based Rank Group.*

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