



SIPA OFFERS LINEAR AND ROTARY OPTIONS FOR INLINE BLOWING AND FILLING WITH PET BOTTLES

TECHNICAL WINDOW - SINCROBLOC

Following the addition by SIPA several months ago of SincroBloc fully integrated PET bottle blowing/filling/capping systems based on SFL linear stretch-blow moulding units, beverage companies can now choose the line that best fits their production requirement for formats of all sizes.

LINEAR BLOWERS FOR BIGGER BOTTLES, SHORTER RUNS, AND MORE

In the beginning, all SincroBloc models were based on SFR rotary stretch-blow moulding equipment. But SIPA found that some customers, especially those bottling water and edible oil, needed a system, clean and compact like the originals, for larger formats up to 12 litres. For this, only linear stretch-blowers will do. Some customers also want to produce only limited quantities, possibly at only 2000 bottles per hour, and for this a linear machine is again more appropriate. Outputs from SincroBlocs now account for all tastes. For example, rotary types can work at speeds of up to 54,000 small and medium-sized bottles per hour, while a system matching an SFL for large formats with a BigFill volumetric gravity-filling monobloc can push out 4000 12-L containers over the same period.

VERSATILITY IN LINEAR AND ROTARY FORMATS

But the capabilities of the SFL SincroBloc units stretch well beyond big bottles and short runs. They can produce and fill small and large containers, in various formats, including bottles with handles. They can also work with all types of liquids, whether they be still water, CSDs, milk, hot-

filled products, or products with high added value such as oils, detergents and personal care. In truth, all SincroBloc systems are very versatile. For example, any one line, whether it is based on a linear or rotary blower, can produce and fill hot-fill and CSD drinks. Numerous SIPA customers have taken advantage of this feature.



LOWER TCO

The linear format has further important advantages. It is very compact, for example, and mechanical movements are simpler than with a rotary stretch-blow section, which facilitates its use. Total cost of Ownership (TCO) is lower too, thanks to lower investment cost and reduced maintenance requirements. That's not forgetting that SIPA SFL stretch-blow systems are among the best on the market. In the last few weeks, SIPA has installed a new complete line incorporating the SFL SincroBloc system at an important customer in Turkey – for production, filling and packing of 5-L mineral water bottles. The line starts with an SFL 6/6XXL and BIGFILL 18-6 with laminar flow according to ISO7 and also includes labelling and shrink-wrapping systems and a Genius-PTF/2 palletizing system. It is designed to run at a speed of 6600 bottles per hour.

MANY OPTIONS TO KEEP THINGS CLEAN, GOODBYE PRESERVATIVES!

Linear and rotary systems both excel with their simplicity and hygiene. There is no need for rinsing between blowing and filling, no need for external conveying systems, and total protection from

the outside environment from the moment the preform enters the feed shoot until the filled and sealed bottle emerges, ready for wrapping. The high levels of cleanliness make it possible for customers to use them for CSDs that contain no artificial preservatives.

On SIPA systems with integrated PET preform and bottle production, various options are now available to maintain the cleanliness of the preforms between the injection moulding machine and the stretch-blow moulding unit. The collection hopper, lift and slide can all be enclosed and subject to over-pressure to keep out dust, for example; preforms can be blown with ionized air and subject to ventilation to remove possible dust; and special ventilation filters can be installed in the reheat oven area.

Various enhancements can also be made to ensure that the filling system is extremely clean and easily sanitized, with advanced cleaning systems for both the production circuit (Clean-In-Place, CIP) and the total filling environment (Clean-Out-of-Place, COP). Automatic false bottle loading, together with the use of microbiological isolation around the immediate filling area, produce a drastic reduction in the space

that needs to be kept under control, making it possible to use sanitizing systems that are highly cost effective.

Furthermore, contamination of closures can be minimized with the use of a peroxide washing tunnel.

A VARIETY OF MECHANICAL AND ELECTRONIC FILLERS

SIPA produces various types of fillers that can be coupled with the linear and rotary blow moulders for small formats. These include the Stillfill Evo mechanical gravity filler for hot- and cold-filled non-carbonated drinks; the mechanical Isofill isobaric level filler for carbonated soft drinks and mineral waters; the Flextronic S and SE electronic volumetric fillers for various types of still liquids and hot-fill products respectively; and the Flextronic W electronic weight filler for products with extra added value.

The Flextronic C electronic multi-product volumetric filling monobloc is suitable for filling CSDs, still and sparkling mineral waters, cold- and hot-fill juices. The configuration of the valve makes it suitable for processing products containing pulps and fibres. On top of all this, maintenance is once again very straightforward.

