



EXTRA LARGE, EXTRA FLEXIBLE, EXTRA SPECIAL

The XTRA range of rotary stretch-blow molding systems from SIPA is well known for its high output capacity and outstanding energy efficiency.

“ These and other features make it possible to produce up to 2,800 bottles per hour, per cavity. ”

But there is more to XTRA than this. XTRA machines are flexible too: even in their basic configuration, they can produce a very wide range of container shapes and sizes, while units designed for hot-fill bottles are just as good at blowing cold-fill types. The time required to switch molds for bottle bodies and necks is very low, so uptime is maximized, and productivity taken to heights that nobody else can match.

Flexibility is taken to an even higher level with special versions, such as XTRA PH (Preferential Heating) and XTRA BIG

That is mainly down to the excellent kinetics of moving components and to the unmatched process angle of 275 degrees. Increasing the process angle provides more time for blowing and in so doing reduces built-in stress in bottles, enabling extremely accurate reproduction of mold surfaces – even the most complex ones.

XTRA SHAPES

The XTRA PH is especially good at blowing bottles with asymmetric cross-sections – ovals or even more complex shapes. Preferential Heating enables an even wall distribution all around the circumference.

A standard stretch-blow molding machine with a conventional oven can provide differential heating in the vertical direction, but it can't heat differently around the

circumference to different temperatures. If a symmetric preform is used to create an asymmetric bottle, some parts of the wall ends up being thinner than others. With Preferential Heating from SIPA, that problem is resolved.

XTRA units with Preferential Heating differ from others in the way the preforms rotate as they pass through particular parts of the oven. The ovens have two distinct, highly controllable, infrared heating zones. Initially, the preforms rotate just like on a regular machine, reaching a certain minimum temperature around their circumference.

THEN, THEY PASS INTO AN AREA WHERE THEY STOP ROTATING.

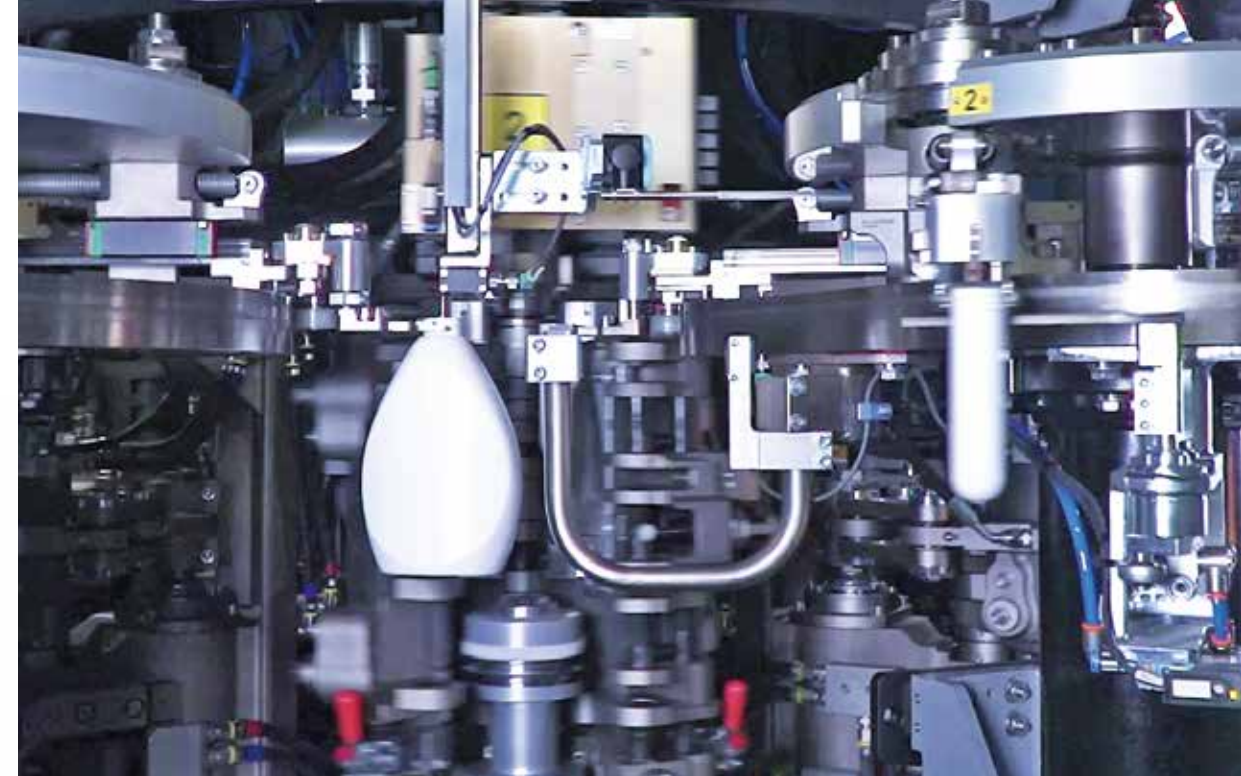
As a result, certain parts of the circumference come out of the oven hotter than others. These are the parts that under normal conditions would stretch less in the blow mould. Instead, stretching is much more uniform all around the circumference.

THE PH OVEN CONCEPT PROVIDES FULLY FLEXIBLE PROCESS CONTROL.

Precise and intuitive infrared lamp conditioning leads to accurate and reliable heating. Sophisticated oven ventilation helps in optimal production of even the most complex containers.

Despite the high level of sophistication, setting up the oven is relatively simple. Process control, with its dynamic monitoring and close loop supervision of heating and blowing, as well as hole detection, ensures constant high quality of finished bottles.

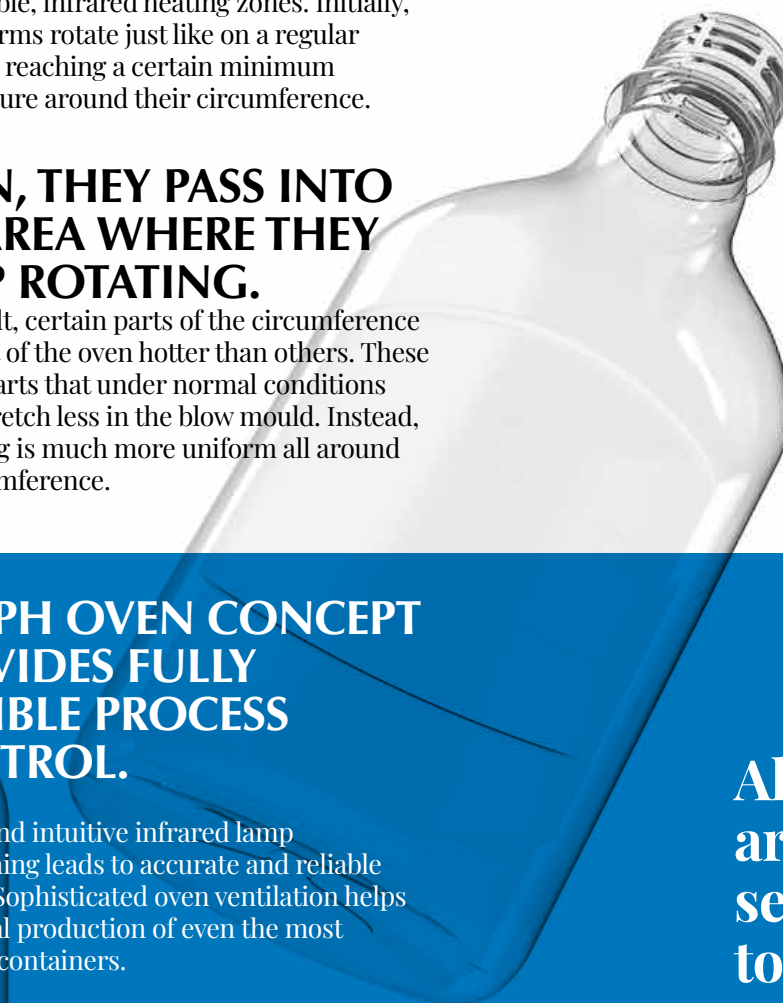
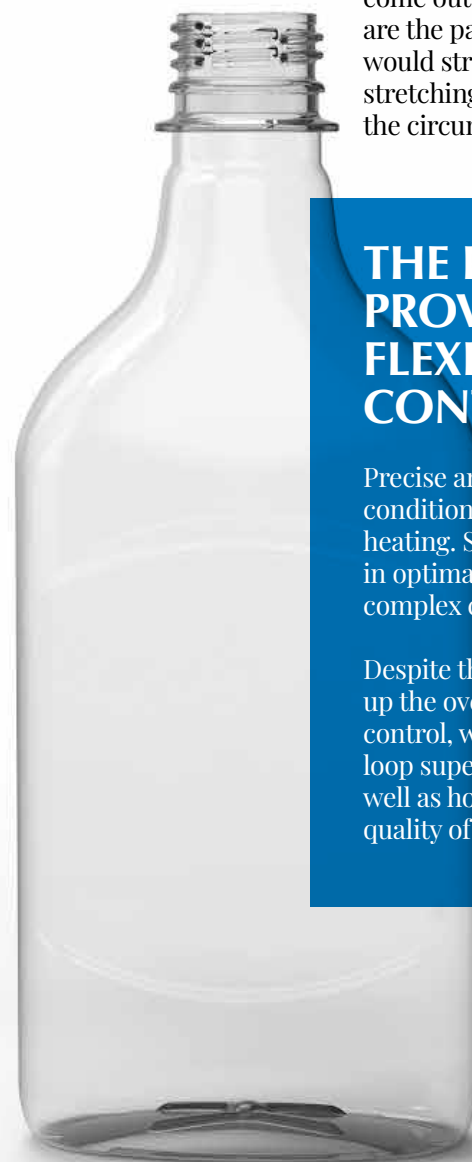
All these parameters are simply saved in set-up parameters, to allow a simple and repeatable production of multiple SKUs.

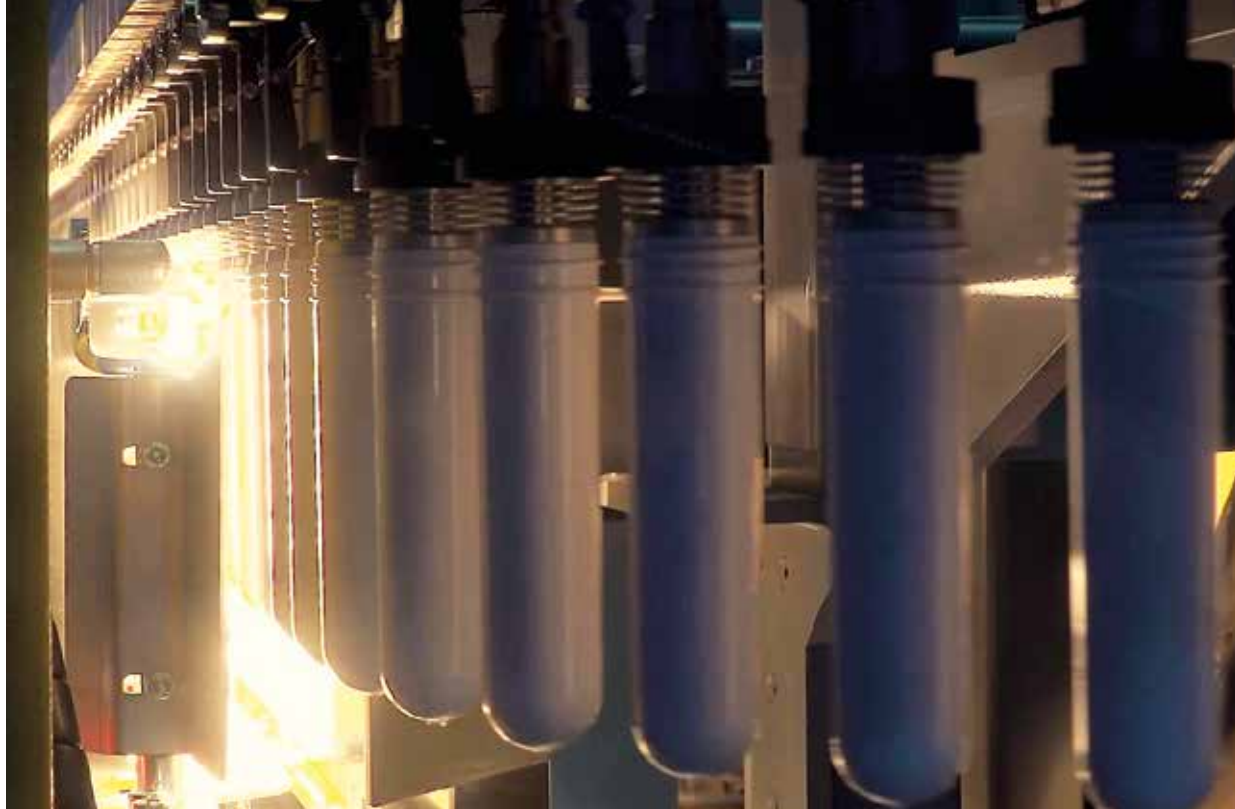


Each position in an XTRA PH oven has its own specific high-performance ventilation, with one fan for incoming filtered fresh air and four fans for hot air extraction, each one adjustable by a dedicated inverter. Meanwhile internal air cooling is done via special bored stretching rods with patterns of holes created according to the design of the bottle.

Thanks to all these attributes, the XTRA PH achieves outstanding output of non-round containers.

If you consider a bottle with an oval shape where, looking down on the cross section, the width is at least twice the depth, an XTRA can produce 2,000 for 500-mL bottles per hour per cavity.





XTRA SIZES

While the XTRA PH is ideal for production of regular-sized bottles with irregular shapes, XTRA BIG variants can blow bigger, symmetric, bottles – bottles as large as 12 liters in fact. Such bottles are typically (but not exclusively) used for packaging water or edible oil.

XTRA BIG units build on SIPA's award-winning process competence in SFL BIG linear systems, including simple preform handling and the specially sized stretch system and blowing block.

Systems share many design features with their regular counterparts – machine layout, preform handling and active grippers are just about the same for example – but the blowing section has been designed specifically for big bottles.



XTRA BIG can be integrated with SIPA's BigFill volumetric gravity-filling monobloc in a new version of the SincroBloc system, which has important advantages in such areas as reduced handling and cleaning requirements.

This form of system integration enables bottling companies to avoid transportation of empty bottles and eliminates the need for rinsing.

XTRA POPULAR

THE XTRA FAMILY IS AVAILABLE IN THE PACKAGING WORLD SINCE 2021

As the system gets put through its paces again at NPE 2024 in Orlando in May, Xtra is riding on the crest of a wave. Sales are well into three figures, and the growth curve is getting steeper all the time. Despite global uncertainties, we believe that the future for Xtra is Xtra bright!

