SBO Highspeed

High speed production for small bottles

Sidel

Sidel's Highspeed equipment can reach top speeds of 61,200 bottles/hour. The equipment meets a dual objective. First, it offers extremely high output rates for the single serve PET bottle market, and it reduces operating costs by improving productivity.

Innovating

To accommodate the on-the-go market boom

Satisfying the small container market

Small capacity PET bottles are very popular with consumers for water, CSDs, and even beer - taking market share away from metal cans. Plastic bottles are recloseable, making partial consumption possible. Because they can be recapped, bottle necks stay cleaner for greater consumer safety. And clear bottles make it easy to see how much liquid remains.

Sidel's goal is equally clear: anticipate and adapt to changes on the liquid product market. Sidel's Highspeed blow molding equipment was born to respond to increasing on-the-go consumption and to meet the need for the very high-speed production of single serve bottles ranging from 0.2 to 0.7 liters.

.

Operating costs cut

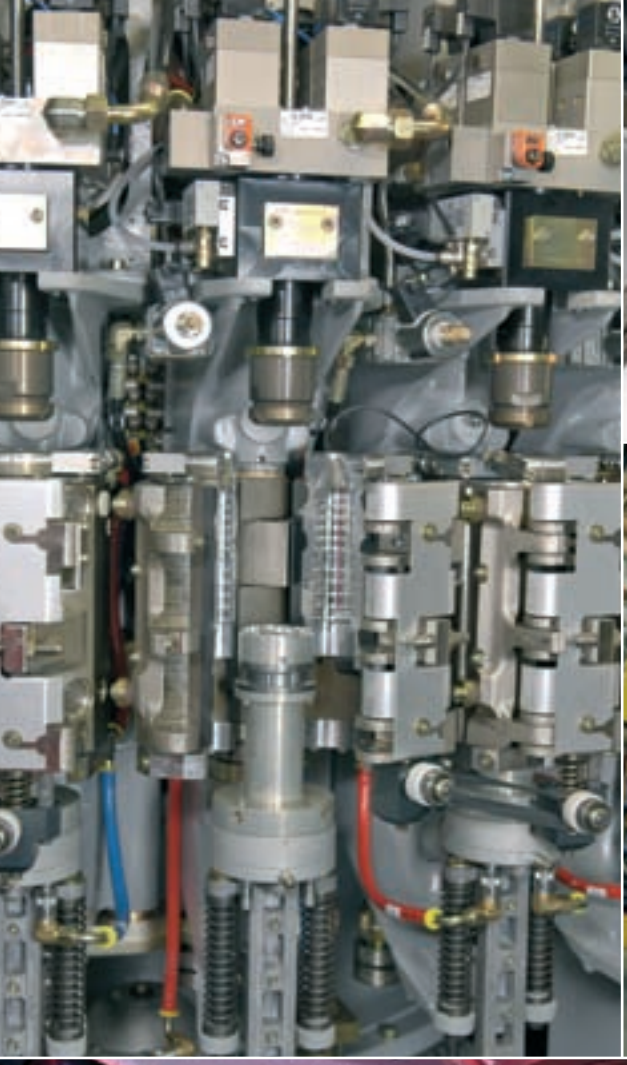
Operating costs are 30 percent lower for production that equals two SBO 20 Series2 machines. The equipment's design keeps spare parts costs down, and Highspeed equipment is very energy efficient. It also consumes less air due to a 40 mm cylinder and an optional exhaust air recycling system.

Marketing trends favor shape diversification, so Sidel offers fast production changeover times on Highspeed equipment. For example, production changeover on an SBO 34 XS Highspeed takes two operators 60 minutes and less than 45 minutes for an SBO 24 XS Highspeed. Reduced maintenance times also help limit machine shutdowns and boost line productivity. Finally, the Highspeed equipment's compact design, based on the frame of an SBO 20 Universal™ blow molding machine, helps reduce the cost of logistics, installation, and start of production.

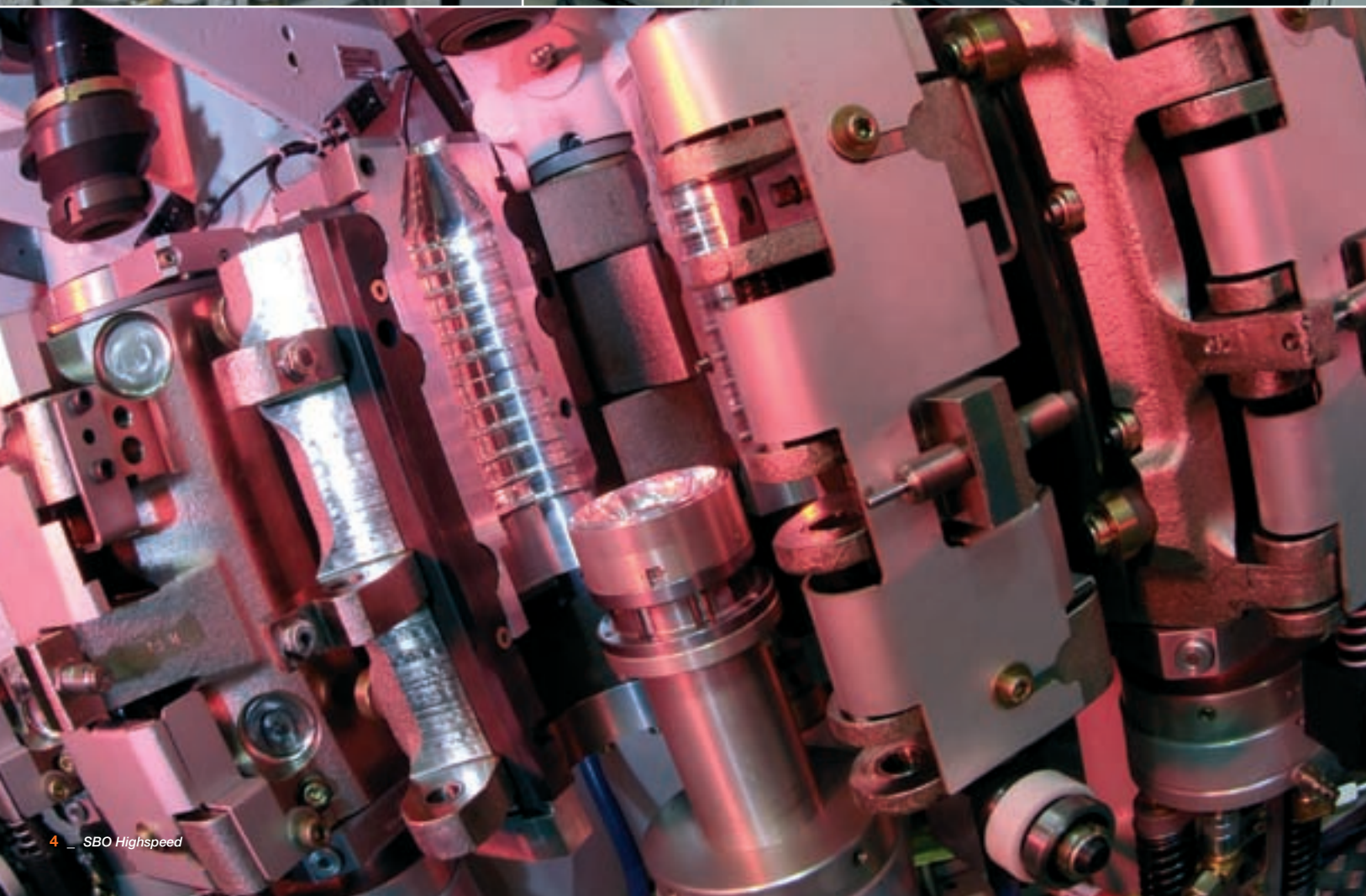
Bottle shape possibilities wide open

A number of developments capitalize on the machine's capabilities. Highspeed equipment can accommodate lighter bottles and produce more complex shapes. It also utilizes molds designed for very high speeds.

For example, Sidel developed a 12 oz CSD bottle weighing 16.5 grams produced at 1,800 bph per mold and blow molded at 25 bar. That package is treated with the Actis™ barrier solution to guarantee a shelf life of 20 weeks. Sidel has developed a 330 ml bottle weighing 23 grams for the beer market. The pasteurizable bottle is produced at 1,800 bph per mold at 30 bar max and has a 6-month shelf life following Actis™ treatment.




Sidel



Technology inspired
by the Universal™ range

Sidel's Highspeed equipment features proven SBO Universal™ technology and shares many Universal™ elements for greater parts standardization.

Advanced oven design

The oven has a spindle chain with a 40 mm pitch making it particularly well-suited to small containers. Based on the SBO Universal™ oven, it features highly accurate radiation heating and a process flexibility that is particularly important for lightweight packages produced at 1,800 bph per mold.

All oven lamps are controlled from the control panel, making the oven energy efficient. With six lamps on each heating module, installed capacity can be reduced.

User-friendly interface

The operator interface is another Universal™ import. Several modifications make this a highly user-friendly tool for the high output rate environment.

Customized preform feeder

Sidel has modified the preform feeder to match machine speed. It uses a large capacity hopper for longer operation without replenishment.

Mechanics designed for high speeds

The kinematics have been calculated to ensure precise transfers at high outputs. They are deployed in a compact system (with a footprint similar to that of an SBO 20) with specific accommodations for small mold support units.

Innovative mold support unit

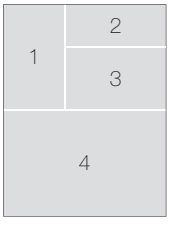
The mold support unit features a completely new and compact design that ensures sufficient rigidity and is suitable for packages with maximum diameters of 75 mm. The unique mold opening/closing mechanisms limit operational gaps and deformations that naturally occur at higher speeds. The patented SBO Universal™ mold base system, which is usually up, has been revamped.

Blow molding station with proven performance

Also part of the SBO Universal™ legacy, the blow molding station is equipped with a 40 mm cylinder that cuts air consumption. Sidel also offers an optional exhaust air recycling system.

Range of SBO Highspeed blow molding machines

	SBO 24 XS	SBO 34 XS
Output rate (1,800 bottles per mold)	43,200 bph	61,200 bph
Bottle capacity	0.2 to 0.7 liters (24 oz)	
Maximum bottle diameter	75 mm	
Bottle height under neck	254 mm	
Maximum neck diameter	38 mm	
Number of oven modules	20	28
Number of molds	24	34
Guaranteed efficiency	94.7%	94.7%
Machine dimensions, excluding hopper *(l x w x h)*	10.6 x 4.9 x 3.9	13.1 x 4.9 x 3.8



1 - *Blow molding station equipped with a 40 mm cylinder cuts air consumption.*
2 - *The SBO Highspeed features a 40 mm pitch spindle chain and radiation oven for heating precision and process flexibility.*
3 - *An extremely user-friendly operator interface is designed especially for high outputs.*
4 - *The new mold support unit is very compact.*

A key line component

The Highspeed Combi: Compact, high-tech dynamo

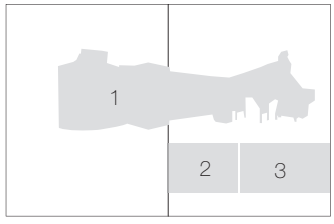
Sidel's Highspeed Combi is the world's fastest machine on the single serve market. Equipped with 34 molds, it produces and caps single serve bottles at top speeds of 61,200 bph. That's 17 bottles per second. Sidel is able to achieve these speeds by successfully synchronizing the equipment's blow molding, filling and capping operations. Furthermore, Sidel uses only the most reliable components. Finally, the equipment features a totally secure preform and cap feeding system. Its compact design, easy operation, and energy efficiency all contribute to lower bottle costs.

The SBO Highspeed in a complete line configuration

The SBO 24 XS and 34 XS Highspeed machines can be incorporated into packaging lines with a one- or two-line bottle exit configuration. When built as a Combi system, these machines offer a competitive alternative to traditional lines. The elimination of conveyors and accumulation equipment makes the Combi two to four percent more efficient than a traditional line and limits risks associated with conveying lightweight bottles at high speeds.

High speeds and barrier treatment

In order to meet high output production needs for small containers for the beer and CSD sectors, Sidel proposes a special barrier treatment called Actis™ 48. Faster than ever, its output rates range from 30,000 (Actis™) to 40,000 (Actis™ Lite) bph. These machines can either be part of a blow molding/barrier treatment/palletizing configuration to produce empty bottles, or they can be integrated into a complete bottling line.



1 - *Sidel's Highspeed Combi is the fastest in the world, producing 17 bottles per second.*
2 - 3 *Sidel's Actis™ 48 barrier treatment is ideal for single serve containers produced at high speed for the beer and CSD markets.*


Sidel

www.sidel.com