

Blow moulding machine AB Series



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The **AB series blowing** machines are linear devices for production of PET bottles (containers) by means of blow moulding and stretching methods using preform blanks with high output of up to 1600 uph from a single mould.

Electronic Advantages

PLC controller by BERNECKER collects information from the machine gauges and controls proper operation of the machine.

Communication with the operator takes place via an operator-**friendly touch screen** control panel integrated with the PLC controller to guarantee fast operating process and prevent errors.

Additional memory **stores technological parameters** for specific preforms and bottle (container) types. To start production, one only needs to select the respective preform and bottle type from the memory.



Advanced failure diagnostics system - the machine stops and alarm message appears on the control panel screen informing about the reason for machine stoppage. That makes solving problems with the machine operation process very easy.

The option to enable the Internet connection allows solving nearly 100% of errors or technical problems.



Economical Advantages

Very low operating costs.

Elimination to the maximum possible extent of the necessity to replace the eroding parts (e.g. by using the highest quality Merkel type sealing).

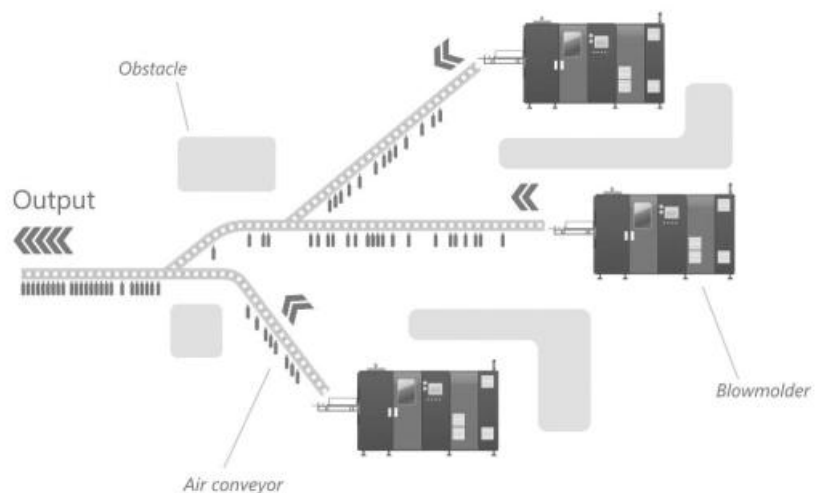
Maintenance service time of 20 minutes per month + renewal of the stretching rod sealings on every 5 million bottles produced.

Several machines of the AB series can be combined using the air conveyors to form a single PET bottle production line.

AB Multi System

AB Multi System is a safe, flexible and cost-effective solution for high output production. This PET bottle production line can achieve an output of up to 20.000 bph.

Multi operation scheme



Mechanical Advantages

High quality **mould clamping system** doesn't need any adjustment during a whole period of machine exploitation.

Displacement of the **stretching rods** is performed by a servomotor-based electric system with a dedicated mechanical system. This eliminates the need to adjust the stretch rods when the blow moulds are replaced. The stretching rod position is **automatically adjusted**.

The stretching process speed is adjustable which is particularly necessary in the case of bottles with complex shapes.

Stretching rods and blow moulds are guided by **the Bosch Rexroth Star linear bearings**.

The **bottle receiving system** is adapted for the connection of a pneumatic bottle conveyor. If a bottle is not blown by the machine (e.g. too low preform temperature is set by the operator) then such preforms are automatically dispensed to a separate container.

A **preform feeding and positioning preform system** are easy to adjust to different preforms neck.

The preform **heating system** consists of four modules with separately regulated halogen heating lamps and is based on the reliable elements of Rockwell company (USA) that allows to increase the heating effectiveness considerably.

Preform temperature is controlled by pyrometers and machine **automatically changes heating power** to achieve the same preform temperature during working.

Blowing system is based on the newest solution of Eugen Seitz (Switzerland) equipped with adjustable flow valve.

The AB Series machines are able to blow PET bottles dedicated to **HOT-FILL** systems.






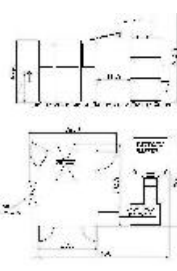

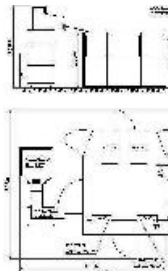
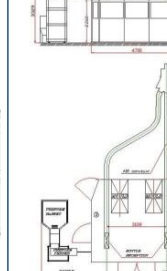



High Quality Components

Swiss company **Eugen Seitz, Festo, Bosch-Rexroth, SMC, B@R Automation, Herion, Moeller, Danfoss, Eugen-Seitz, Adphos**.



Models specification

Description	Model	AB2/1	AB 4/1	AB 4/2	AB 8/2	AB 1-5
Personnel		1				
Type of preforms		PCO, semi PCO, BPF				
Number of cavities		2	4	4	8	1
Cavities configuration		2 × 1	4 × 1	2 × 2	4 × 2	1 × 1
Speed production	500 ml	3 300	5 500	6 400	11 000	Na.
	1 500 ml	3 000	5 400	6 200	10 000	Na.
	2 000 ml	3 000	5 300	6 000	9 800	Na.
	5 000 ml	Na.	Na.	Na.	Na.	1 200
Bottles dimensions	Bottle diameter	Ø45 – 115 mm		up to 90 mm		up to 170
	Bottle	100 – 350 mm				
	Neck diameter	28 mm – 48 mm				
Total Power installed kW		88	122	150	190.	60
Used Power		42	56	70	95	32
Air consumption 40 bar		220	390	440	649	300
Air consumption 8 bar		50	50	60	85	45
Dimensions mm		4550 × 3450 × 3350	4750 × 3750 × 3350	5700 × 4000 × 3320	6700 × 4300 × 3320	4550 × 3450 × 3350
Weight kg		2 850	3 400	4 500	7 800	2 700
Photo						
Drawing						



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