

Mineral water filling plant

Capacity: 3.300 litres

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COMBI²⁰⁰

Blowing pressure	25 bar			
Output version 0.25 to 2.0l	up to 2400 bottles 1.5l / h			
Consumed power	28 kW			
Blowing air quantity	90 m ³ / h			
Number of cavities	2			
Steering voltage	24V / DC			
Mould material	FORTAL			
SET COMPONENTS SIZES AND WEIGHT				
	HEIGHT	WIDTH	LENGTH	WEIGHT
COMBI	1750 mm	800 mm	1700 mm	700 kg
Mould	made per order			
Bottle conveyor	1200 mm	400 mm	2400 mm	70 kg
Chiller	900 mm	500 mm	600 mm	85 kg
Perform loader	2400 mm	1100 mm	2500 mm	150 kg
Compressor set	1250 mm	1165 mm	710 mm	490 kg
Air tank	2000 mm	Ø 1000 mm		500 kg
Air filter	300 mm	Ø 150 mm		2 kg
Air dryer	600 mm	700 mm	700 mm	30 kg

COMBI PET blower represents compact manufacturing equipment operating in fully automatic cycle. COMBI machines are used to manufacture bottles and other containers made out of Polyethylene Terephthalate (PET) using the preform reheating and blowing technology

- The semi product for bottle production is the PET preform. The weight, shape and neck diameter of the original preform depends on the usage of the final product container.

➔ COMBI is used for manufacturing the containers/bottles at the size up to 2.5l

The shape and size of the bottle being produced can be changed through simple exchange of the blowing moulds and adequate regulation of the system of stretching and heating preforms. The same neck dimension preforms need to be used in the same blowing machine.

➔ The operation of the machine does not require specially qualified labor. Also the maintenance of the machine has been reduced to few simple procedures. All COMBI machines are equipped with adequate safety features.

- ➔ The system for heating preforms consists of infrared lamp panel located in the oven part of the machine. Preforms are moved alongside the lamp panel.

The infrared lamps emit the specified wave lengths, which enable the effective and most optimal thermal preheating of the preforms. This guarantees proper material thickness distribution of the blown bottles.

The intensity of heating of each zone can be regulated separately in order to adjust the heating power to the type of preform being used.

- ➔ The blowing of the preform has been performed in two steps:
- Preliminary blowing and preform stretching
 - Main blowing
- ➔ Cooling circles have been used for cooling the moulds. A special design enables to regulate precisely the temperature of the cooling and quick thermal stabilization of the blown bottle. The applied Fortal material guarantees mould proper durability and longevity.
- ➔ PLC electronic steering system controls all steps of the production cycle and the systems of the machine.
- ➔ COMBI machine has the auto diagnostic function. This system informs via PLC steering system about the failure identity and provides information about the failure in operation of the machine.
- ➔ Nominal output of a single COMBI module is up to 2400 bottles/hour and depends on the size of the blown bottles, bottle and preform design. This parameter has been calculated for the size of bottle 1.5l, but depends also on the thickness of the walls of the bottle and the type of preform being used.
The required production space for one blowing module is 20 square meters.
- ➔ The applied compressor is a low noise screw compressor. 2,5 bar compressors are recommended to use for blowing bottles with complex shapes.

Triblock 12/12/1

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BEFA
DIN EN ISO 9001:2000 certified

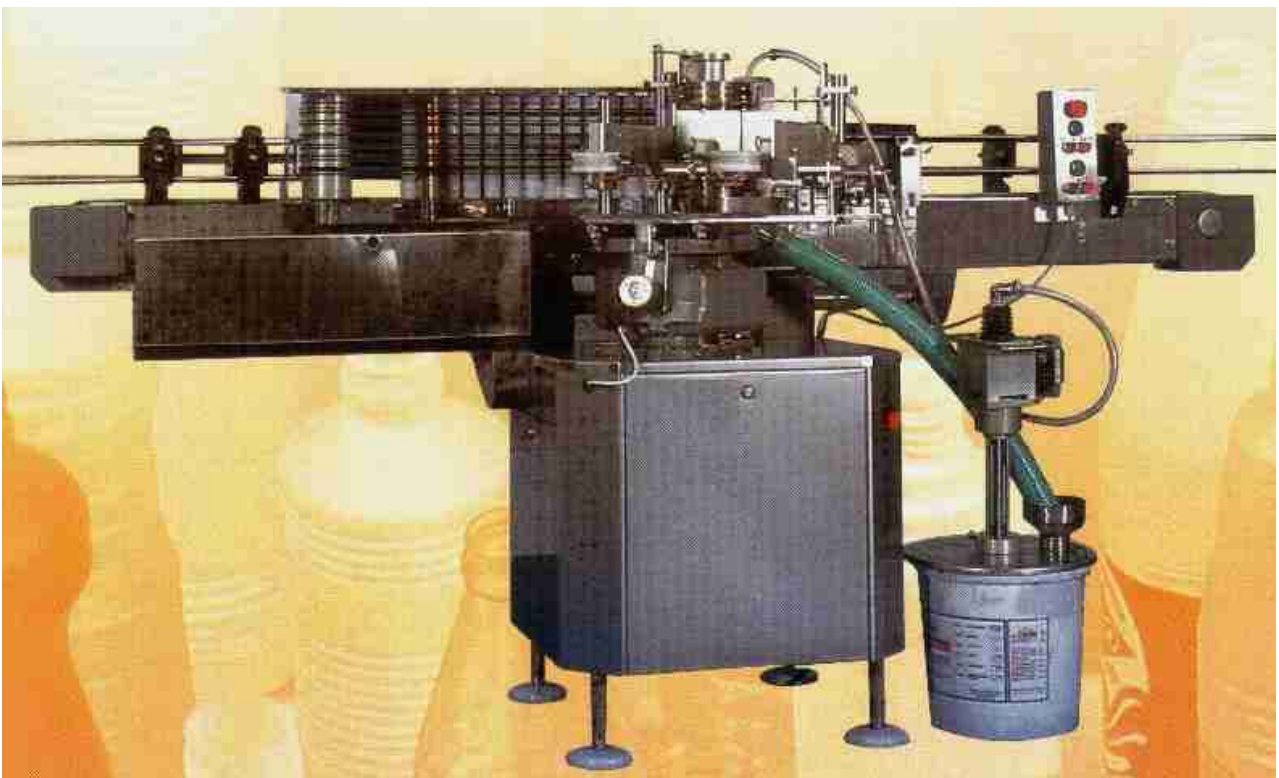
Automatic rinsing, filling & capping



AUTOMATIC TRIBLOCK TYPE 12/12/1	
Product to be filled	still mineral water
Bottle type	PET bottles 1,5 lt.
Closure type	plastic screw caps
Number of rinsing heads	12
Number of filling valves	12
Number of capping heads	1 magnetic head
Filling system	by gravity
Voltage	380 V. 50 Hz.
Direction of rotation	Clockwise
Working height	1050 mm. \pm 50 mm
Conveyor dimensions	mm. 100x125h
Conveyor chain	in stainless steel, width 82,5mm
Capacity	2.200 bottles/h. on 1,5 lt.
Machine complete with	
<ul style="list-style-type: none"> - gear-motor for electron variable speed adjustment - electric plant - equipment for two bottle and one cap size. 	
ADDITIONAL	
<ul style="list-style-type: none"> ▪ STAINLESS STEEL FEED PUMP ▪ PHOTOCCELL FOR AUTOMATIC START/STOP ▪ SAFETY GUARDS ACCORDING TO THE CE RULES 	

EA - 3000

Automatic labeller



AUTOMATIC LABELLING MACHINE

EA 3000

TECHNICAL DATA	
Capacity	3000 bph
Power Supply	380 V / 50Hz
Bottle diameter	50 – 100 mm
Labelling area	2 – 200 mm
Label Dimensions	
Length	60- 170 mm
Height	60 –200 mm
Machine dimensions	
Weight	470 kg
Length	2500 mm
Width	900 mm
Height	1320 mm

Electrical parameters

Drive: two-speed electric motor (1430/2820 rpm), 2kW
Supply voltage: 380 V, 10 A
Conveyor distance from shop floor: 950-1100 mm

Machine components

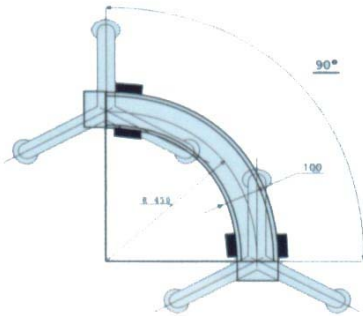
- Support structure of four legs of welded steel profiles and support plates
- Main drive of an electric motor, a worm transmission, belt transmission
- Control cam as shaft supported on bearings within an iron sleeve
- Intermediate drives
- Rotation mechanism performs pendulum motions made up of aluminium casing, a steel sleeve and a drive shaft.
- Label holder made up of brackets with horizontal bars
- Conveyor
- Glue dispenser made up of a glue container with an internal gear pump and a glue inlet pump
- Pickup worm made of plastic and supported on bearings located in two lever arms
- Final roller section

Conveyor

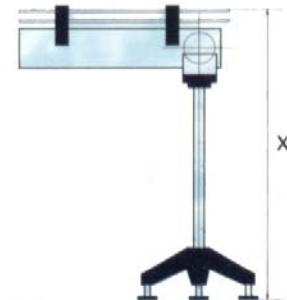
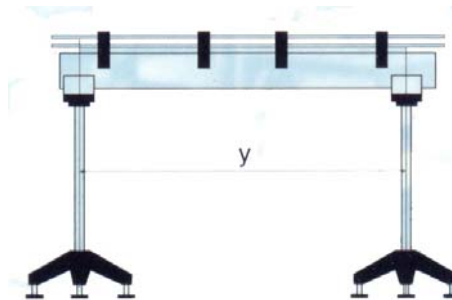
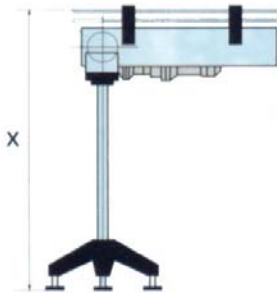
xpp series



Conveyor XPP series – technical data



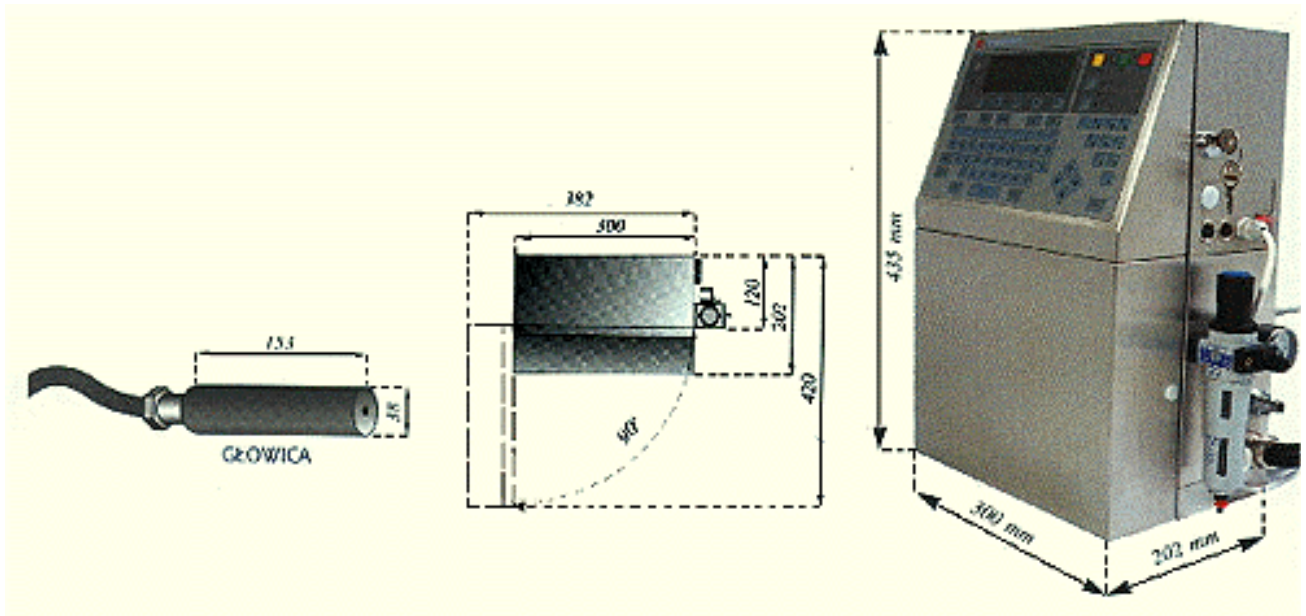
There is a possibility to make 90° turns in the transporters line.



Dimensions	
Height X (left & right drawing)	Set to the needs of the production line
Width	Set to the needs of the production line
Stand wide Y (middle drawing)	Up to 1500 mm
Max length of Y element	1500, 2000, 2500 mm
Turn degrees	45 & 90 grades
Drive unit	Motoredactor – set for the needs of the line
Power supply	380 V/ 50 Hz
Transporting speed	Set for the needs of the production line

Dating equipment

EBS 6000 jet printer



EBS 6000

TECHNICAL DATA

PURPOSE	It is non-contact printing. It can print onto almost any shape or texture of packaging substrate with delicate or irregular surfaces
PRINTING MATRIX	the character matrix used may be either 5x5, 7x5, 9x5, 16x10, 21x15, 25x15, 32x18, 9x7, 11x8, 16x14 dots.
PRINT HEIGHT	character height 1.5 up to 14 mm
LINES OF PRINT	up to 4 lines of variable text in the font style of your choice

OPTIONAL

CHARACTERISTIC

- foil keyboard;
- liquid cristal display (LCD) which displays exactly the message to be printed (WYSIWYG);
- menu: messages available in selection of six languages (Polish, English, Danish, German, French, Spanish);
- memory 256 KB enabling to store up to 1000 texts;
- bold print up to 15 times;

MESSAGE STORAGE

- any text of alpha-numeric characters ;
- fixed and variable data (special register) such as auto dating serial number (increasing and decreasing meter), batch number, real time clock function, shift code;
- barcodes;
- logotype;
- graphics: up to 32 dots printed in any part of text;
- non-pigmented ink;
- colour: black, red and blue;
- consumption: up to 100 million characters in matrix 7x5 per liter of ink;

INK:

SOLVENT CONSUMPTION:	about 80 printer working hours
ELECTRICAL REQUIREMENTS:	AC 220 V, max 30W
REQUIRED AIR PRESSURE:	4.5 to 6.5 bar free of oil and water
UNIT SIZE	length 300 mm width 202 mm height 435 mm
WEIGHT:	16 kg

Automatic packing machine

SAWP 700/1D

This packing machine is a device with electric-pneumatic drive and electronic operation system. It is equipped with an upper and bottom automatic foil feeding system as well as a receiving-feeding conveyor installed behind the sealing-cutting system. It is perfectly suited for companies of small and average production capacities.

Main parameters:

- efficiency – up to 350 packages a 6 bottles per hour
- installed power - 3 kW
- air demand - 9 m³/h

operation - 1 person

This packing machine cooperates with the

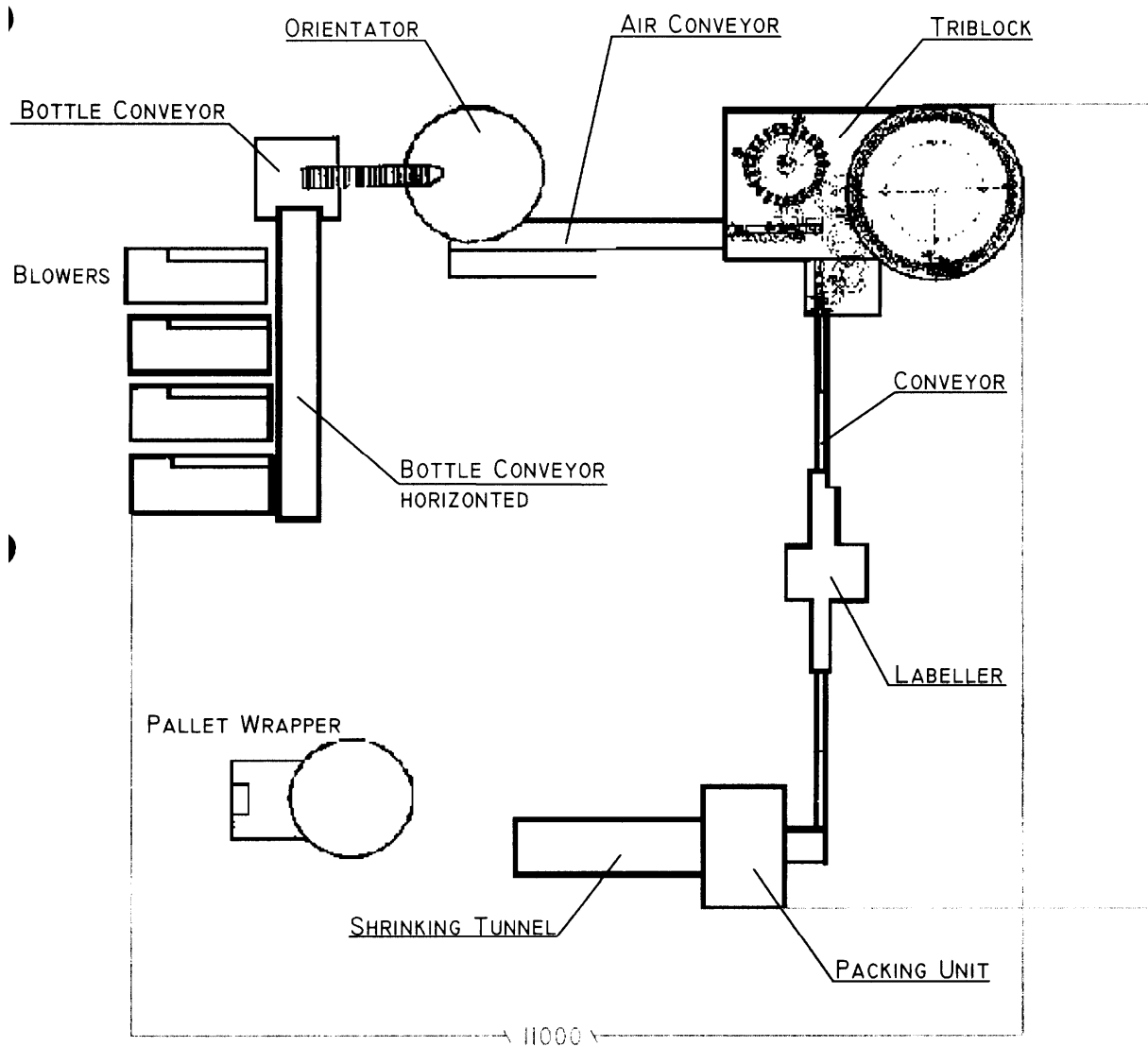


Heating tunnel STM 50'40/2RDK.

Heating tunnel type STM serves for thermal contraction with foil of various kinds of products in bulk packages (PET and glass bottles, jars, wood, foamed polystyrene, flour, sugar, plastic and other). The system of packing used in STM tunnels is safe for products due to the short time required for them to stay in the heating chamber. The size of the heating chamber and the installed power depend on the size of a packet.



A sample-drawing for a mineralwaterplant



Optional parts:

1. Premixing station

This is the equipment to produce soft drinks and carbonated water to increase your product scope. The premixing station is available in a fully automated version and in a mechanical option.

2. CIP unit

Cleaning In Place is a new technology, which comes from the pharmaceutical production. It is the cheapest and easiest way to reach a high sanitization level. The CIP unit cleans filler bowls and similar devices with hot cleaning solutions.

The unit is complete with a storage tank with integrated pipe heat-exchanger and thermometer, centrifugal pump with integrated piping to the tank, electric board for the control of the pump.

3. Air conveyor and orientator

The airconveyor transports the empty bottles from the blowmoulding machine to the Triblock. This equipment simplifies your production and saves long ways.

4. Additional moulds and forms

All moulds up to 2,5 litres available.

The equipment must fit to the mould. The price format includes the tuning of the equipment to the desired mould.

These options have to be taken together to receive the full guarantee.