

# *polaris*

*automazioni*

BOTTLING LINES  
SPIRITS



Made in Italy

The Olive Centre  
EQUIPMENT | MACHINERY | ADVICE

[www.theolivecentre.com](http://www.theolivecentre.com)

# SPIRITS

## Automatic bottling lines



**Spirit bottles show unlimited imagination in their design.** Their numerous shapes are often linked to the type of product being bottled and, therefore, become a unique regional/national trademark.

**Grappa, Cognac, Whisky, Vodka, Gin, Brandy, and many others more.**

Each company has its own style of producing and packaging its bottles, depending not only on the type of product, but also on the brand... they can be simple, classic and elegant or so sophisticated they border on being true works of art.

As a result, spirit filling not only requires bottle size and shape **flexibility and changeover speed**, but also **special care for the overall package**.

To meet this need, **Polaris** has developed two **different solutions** for an **impeccable result**.



**Polaris** has also paid special attention to product integrity during the bottling phase by using **systems studied ad hoc, which do not in any way modify the degree of alcohol**.

The **Polaris range of machines** varies from **500 to 2500 bottles/hour** and meets all the requirements from small businesses to large distilleries for bottling spirits.

Low-production lines can be operated by **one person**, while higher-output lines can be equipped for **fully autonomous operation**.

*Polaris Automazioni manufactures automatic bottling lines whose advanced technologies set them apart from other machines.*

No use of star wheels, feeders, worm screws, etc., in other words, specific accessories for each type of bottle and that, therefore, need to be changed with each size changeover, resulting in added costs for their purchase and time for their replacement.

**The lines manufactured by Polaris** use a special patented conveying system that through simple and quick adjustments **ensure maximum bottle size and shape flexibility, without the need to replace machine parts**.

This means **exceptional bottle flexibility** and **super quick changeovers, resulting in lower costs for this process and higher profits**.

**These two features make Polaris the top choice in all areas where different bottle formats are used.**

- ▶ **Spirits**
- ▶ **Oil**
- ▶ **Vinegar**



THE COMPETITIVE BENEFITS OF AN EXCLUSIVE, PATENT-PROTECTED SYSTEM **ENTIRELY MADE IN ITALY.**

**BREVETTI  
BERTANI  
PATENTS**

**polaris**  
automazioni

## When should you choose a Polaris line:

Let's sum up the main requirements of those who choose a Polaris line.



### CHANGEOVER FLEXIBILITY

It takes just a few simple adjustments to get the bottling line to go one bottle format to another.



### CHANGEOVER SPEED

It takes 10 to 30 minutes at the most.



### VERSATILITY

The lines accommodate a wide variety of bottle shapes and sizes. From 50 ml to 2 l and miniature bottles in any shape: cylindrical, square, triangular, jars, flasks, etc.



### FLAWLESS LABELLING

This applies to every bottle, even with unusual shapes. Our labellers incorporate special devices that enable application with millimetre precision and flawless packaging.



## BOTTLE CHANGEOVER IN 3 SIMPLE STEPS:

When it comes to bottle size changeover, everything has been designed to achieve two goals: **Fast and easy execution.** With the Polaris system, the changeover process is essentially performed with these operations:

- 1. Adjustment of the conveyor belt according to the size of the bottle** (no need to focus on the shape, which is totally irrelevant). This step takes just a few minutes with our patented device, which adjusts the bottle conveyor belt. On conventional lines, this step involves the extremely time-consuming replacement of star wheels, measuring devices and worm screws.
- 2. Adjustment of operational heads** (filler, capper, labellers, etc.) This operation is performed using rev-counter flywheels that help to find the desired height and position quickly based on the bottle to process.
- 3. PC use.** Bottle recipes are saved in the machine-controlling PC and can be easily called up for future production.

**Customers can autonomously add new sizes to their production at any time.**

The Olive Centre  
EQUIPMENT | MACHINERY | ADVICE



## Configuration and main specifications of bottling lines:

Our bottling lines consist of a single, stainless steel unit customised with all the operational heads required to complete the customer's entire, specific production cycle.

*The heads used in the lines for spirits usually include the following:*

### **Blower / rinser:**

**the blower** is included when it is necessary to add deodorised, compressed air into the empty bottles via a special carbon filter. **The rinser**, on the other hand, is used when the customer needs to rinse with drinking water or with a liquid product specially prepared for this purpose. In the latter is used, a unit is supplied to enable that liquid to be filtered and recycled for other work cycles.

### **Filler:**

There are various filling methods available. Glass bottles are usually filled using the **direct vacuum method** i.e. the nozzles are inserted into the bottles, where they suck out the air inside and create a vacuum to facilitate and speed up bottle filling with the spirit. **PET bottles can also be filled via the pressure method**, by blowing deodorised air into the filler tank, which then pushes the spirit into the bottle.

*On bottling lines for spirits the filler is made of stainless steel AISI 316 L.*

### **Washing the filler:**

All our filling machines have an automatic, internal wash programme, which enables all the parts in contact with the product (e.g. piping, nozzles, internal filler parts, etc.) to be washed thoroughly before beginning a new production, if required, or after a prolonged period of machine downtime. If your products are animal-protein based, you can use a special washing method to remove any residue from the filler.

### **Levelling device:**

this device is inserted into the neck of the bottle after filling to suck out any excess liquid to the correct level. This enables the filler to be adjusted as little as possible, and usually only requires the device to be placed at the correct height to fill the bottle.

### **Capper:**

applies and closes both pressure and screw-on caps. The capping head fits all caps, whereas other parts require specific tools according to each type of cap.

### **Cappers for crown caps and wine corks flush with rim.**

These types of caps require a specific capper, which can be positioned on the line next to, or as a replacement for the standard capper.

**Capsule dispenser**, for heat-shrink, aluminium, and tin capsules. An operational head sets the capsule on top of the cap and, if a heat-shrink capsule, it is closed with a shrink oven; if aluminium or tin, it is closed with roller heads.

### **Orienting device:**

this operational head allows you to rotate cylindrical bottles, so they are correctly positioned before applying the label. The bottles are turned using the notch below or on the sides, the decoration on the glass or the handle.

### **Labellers:**

The line can be equipped with labellers, which apply a label on the front, back, on three sides, and collar labels around the neck, e.g. crescent-shaped or shoulder labels.

The labellers have been studied and designed to guarantee application with millimetre precision on every type of bottle to ensure impeccable packaging, even for unusually shaped bottles. The labeller is adjusted in a simple and effective way.

### **Printer for legal dates and batch numbers:**

a thermal printer is positioned to print the legal dates and batch numbers on the back label (or elsewhere on request). If you have specific requirements, we can also use ink jet or laser printers.

### **Paper and glue or self-adhesive seals:**

whether they are seals for tax purposes or only as a guarantee, Polaris has designed various operational heads, capable of applying them in different positions on the bottle according to requirements.

*Our machines for spirits are designed in compliance with CE-ATEX and UL-NEC regulations, which are applied according to the degree of alcohol used by the customer.*

### **The line is equipped with a series of controls/**

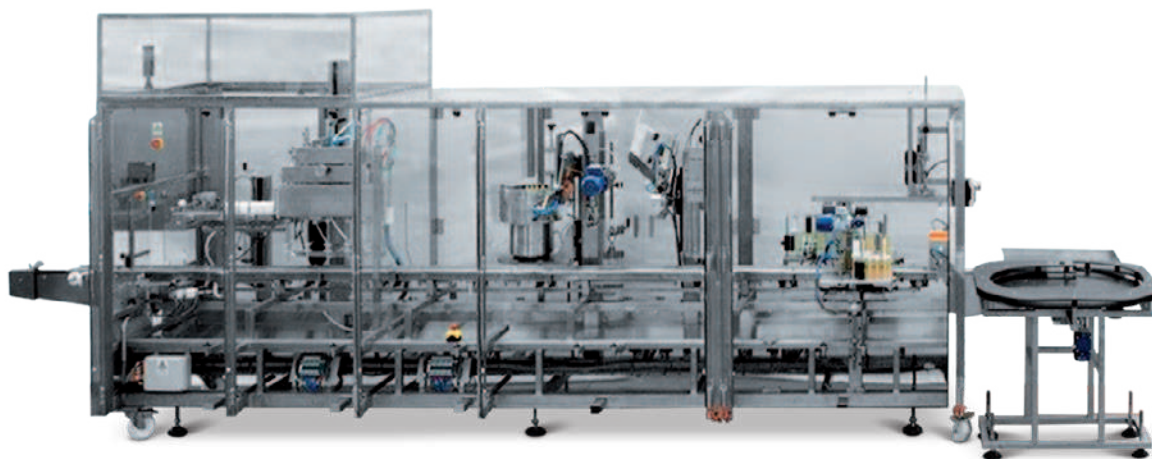
**alarms**, which allows you to check the various bottling phases. The main alarms already in standard production on the lines are: Alarm to detect lack of filling product, to check for presence of the cap, alarm to detect missing heat-shrink capsules, alarm to detect missing labels.

**Additional controls** can be added on **higher output lines** for a fully automatic and autonomous cycle.

### ***Polaris bottling lines are personalized.***

Polaris will work with the customer to identify the line type and configuration in order to fully meet each specific requirement.





## B3

Automatic  
bottling line

<b>FILLER</b>		5 nozzles
<b>NOMINAL PRODUCTION RATE</b>		500 bottles/hour
<b>BOTTLE DIAMETER or WIDTH</b>	min / max	40 mm / 108 mm
<b>BOTTLE HEIGHT</b>	min / max	140 mm / 380 mm
<b>SUITABLE LABELS</b> roll of self-adhesive	L min/ H max	125 mm / 200 mm



## B5

Automatic  
bottling line

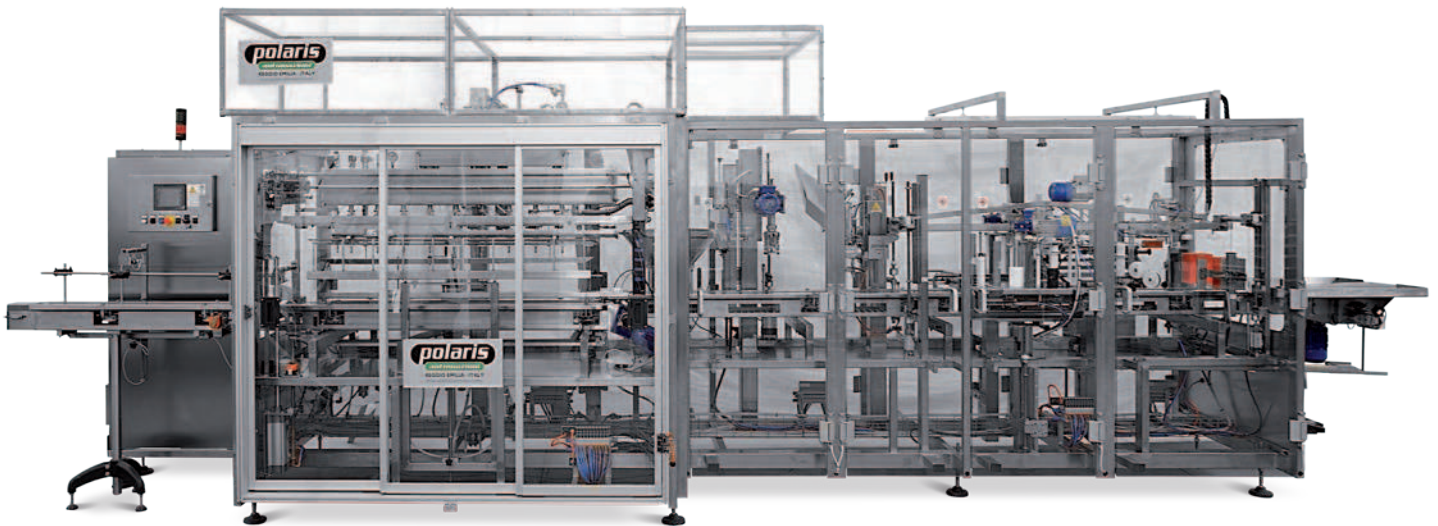
<b>FILLER</b>		8 nozzles
<b>NOMINAL PRODUCTION RATE</b>		900-1000 bottles/hour
<b>BOTTLE DIAMETER or WIDTH</b>	min / max	40 mm / 108 mm
<b>BOTTLE HEIGHT</b>	min / max	140 mm / 380 mm
<b>SUITABLE LABELS</b> roll of self-adhesive	L min/ H max	125 mm / 200 mm



## B5L

Automatic  
bottling line

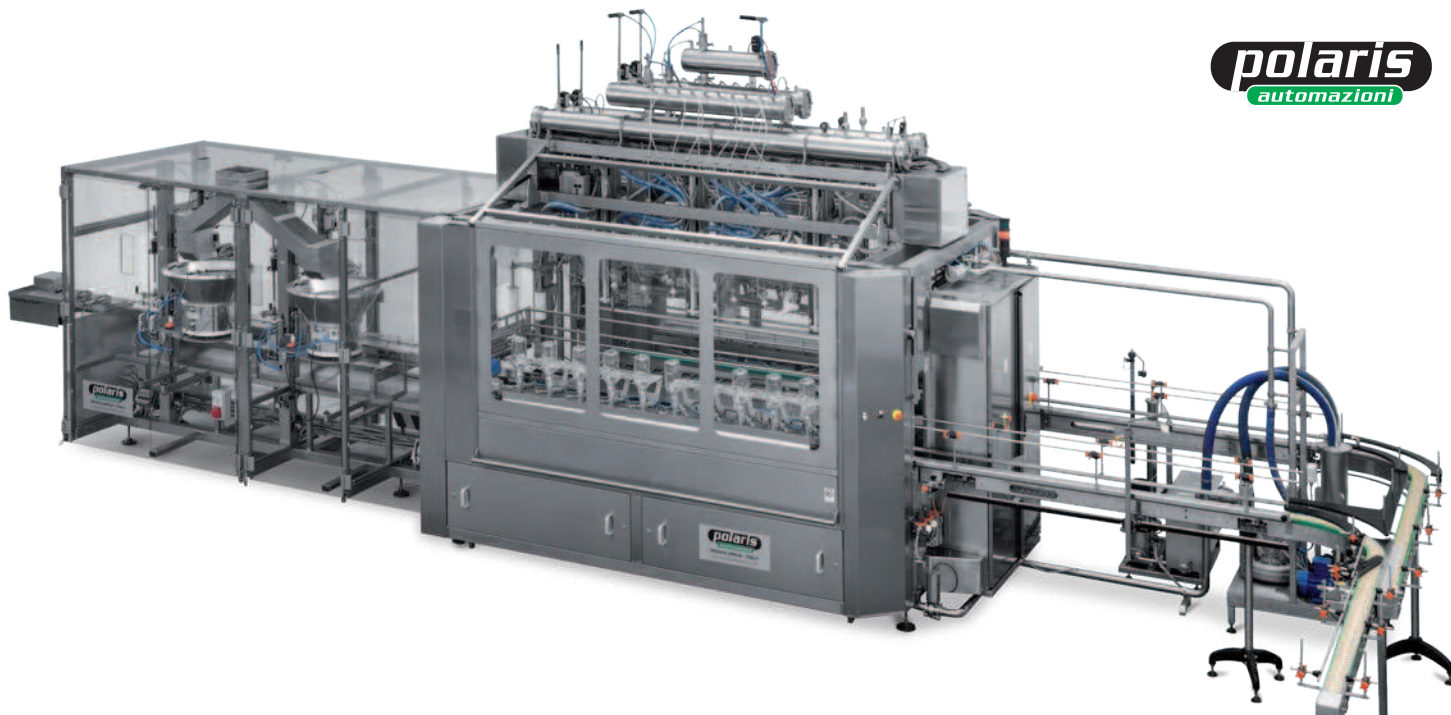
<b>FILLER</b>		8 nozzles
<b>NOMINAL PRODUCTION RATE</b>		1000 bottles/hour
<b>BOTTLE DIAMETER or WIDTH</b>	min / max	40 mm / 170 x 120 mm
<b>BOTTLE HEIGHT</b>	min / max	140 mm / 380 mm
<b>SUITABLE LABELS</b> roll of self-adhesive	L min/ H max	150 mm / 200 mm



## B6/B6L

Automatic  
bottling line

		<b>B6</b>	<b>B6L</b>
<b>FILLER</b>		10 nozzles	10 nozzles
<b>NOMINAL PRODUCTION RATE</b>		1100-1500 bottles/hour	1100-1500 bottles/hour
<b>BOTTLE DIAMETER or WIDTH</b>	min / max	40 mm / 120 x 120 mm	40 mm / 170 x 120 mm
<b>BOTTLE HEIGHT</b>	min / max	140 mm / 380 mm	140 mm / 380 mm
<b>SUITABLE LABELS</b> roll of self-adhesive	L min/ H max	140 mm / 200 mm	140 mm / 200 mm



# B12

Automatic  
bottling line

<b>FILLER</b>		10+10 nozzles
<b>NOMINAL PRODUCTION RATE</b>		2500 bottles/hour
<b>BOTTLE DIAMETER or WIDTH</b>	min / max	40 mm / 210 x 210 mm
<b>BOTTLE HEIGHT</b>	min / max	140 mm / 510 mm
<b>SUITABLE LABELS</b> roll of self-adhesive	L min/ H max	200 mm / 200 mm



# BM1500

Automatic  
bottling line  
Mignon bottles

<b>FILLER</b>		6 nozzles
<b>NOMINAL PRODUCTION RATE</b>		1500 bottles/hour
<b>BOTTLE DIAMETER or WIDTH</b>	min / max	20 mm / 65 mm
<b>BOTTLE HEIGHT</b>	min / max	70 mm / 180 mm
<b>SUITABLE LABELS</b> roll of self-adhesive	L min/ H max	70 mm / 150 mm

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