

polaris

automazioni

BOTTLING LINES
EDIBLE OIL



Made in Italy

The Olive Centre
EQUIPMENT | MACHINERY | ADVICE

OIL

Automatic bottling lines



Olive oil producers are seeing an increasing need to **distinguish their product** from those of other producers.

The **shape of the bottles** and the **care with packaging** are strong points and have become a distinguishing mark for each oil producer.

This need is felt by farmers or small businesses, by medium or large companies that produce or sometimes only bottle oil without distinction.

In fact, to emerge on the market, small producers have to make their product packaging stand out, whereas larger companies sometimes have a flagship product bottled by high-speed machines, which are unable to work with smaller batches.

This is where a multi-purpose line comes into play.

The Polaris range varies from **500 to 2500 bottles/hour** and meets all the requirements for bottling oil.

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**



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

**BREVETTI
BERTANI
PATENTS**

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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.



Configuration and main specifications of bottling lines:

Our bottling line consists 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 oil usually include the following:

Blower:

to blow deodorised, compressed air into the empty bottles via a special carbon filter, or nitrogen produced by a special generator (not included in the supply) or by a canister.

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 oil. **PET bottles can also be filled via the pressure method**, by blowing deodorised air into the filler tank, which then pushes the oil into the bottle.

On request only for the B6 and B12 systems, the filler can be equipped with mass flow litre counters to guarantee bottle contents with gram precision. 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.

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.

Nitrogen injector:

once inserted in the levelling device, this enables a preset quantity of nitrogen to be blown into the neck of the bottle, which has just been filled, before it is capped to enhance conservation.

Capper:

the capper can apply and close both pressure and screw-on caps. The capping head fits all caps, whereas other parts may require specific tools according to each type of cap.

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.

The line is equipped with a series of controls/

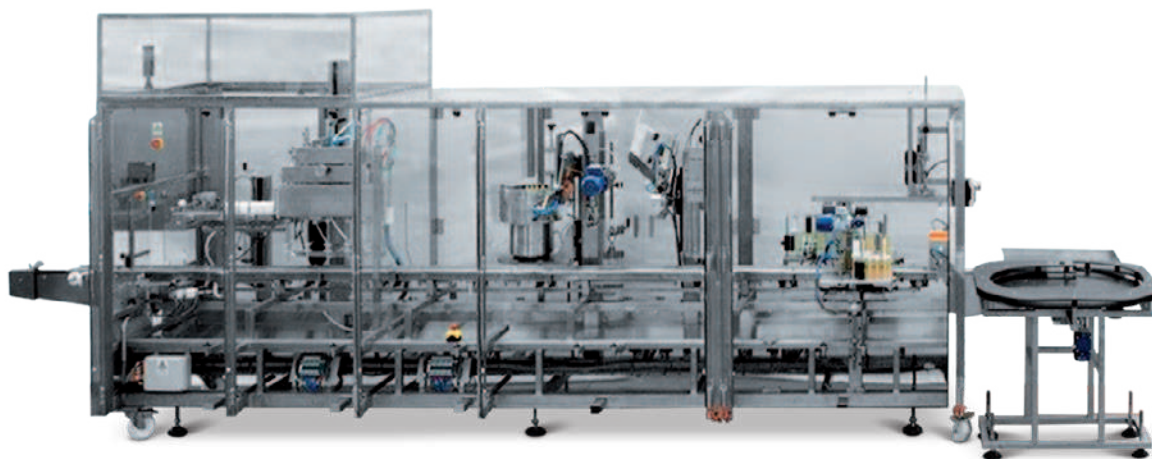
alarms, which allows you to check the various bottling phases. The main alarms already in standard production on the lines are: Alarm to detect lack of filling product, to check for presence of the cap, alarm to detect missing heat-shrink capsules, alarm to detect missing labels.

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

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



B5

Automatic
bottling line

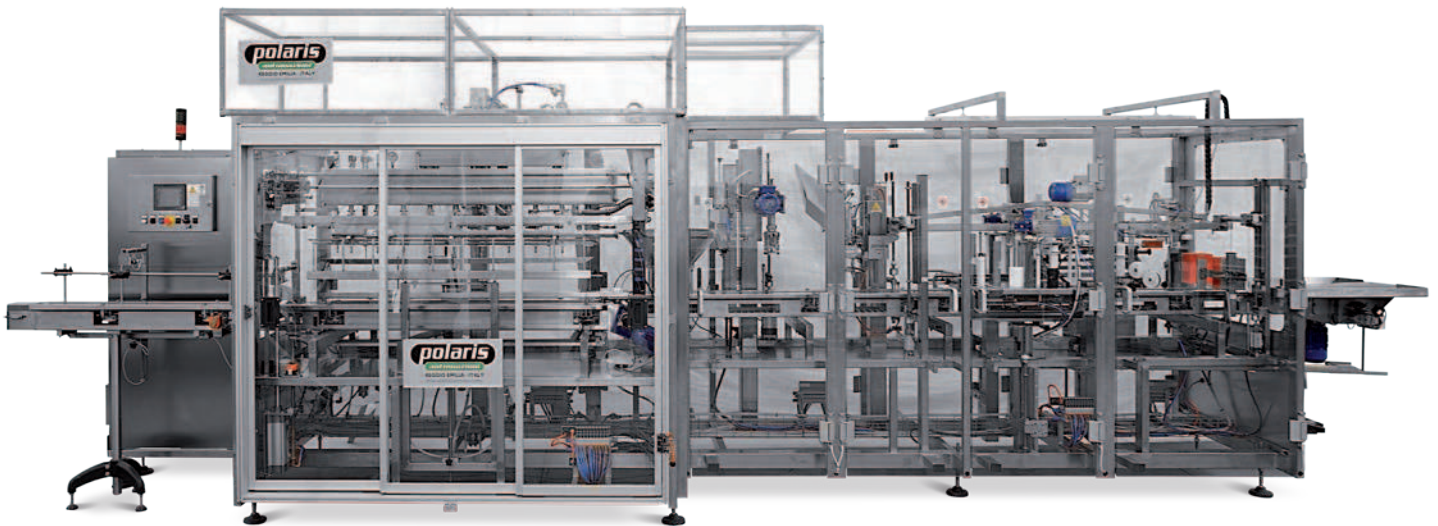
FILLER		8 nozzles
NOMINAL PRODUCTION RATE		900-1000 bottles/hour
BOTTLE DIAMETER or WIDTH	min / max	40 mm / 108 mm
BOTTLE HEIGHT	min / max	140 mm / 380 mm
SUITABLE LABELS roll of self-adhesive	L min/ H max	125 mm / 200 mm



B5L

Automatic bottling line

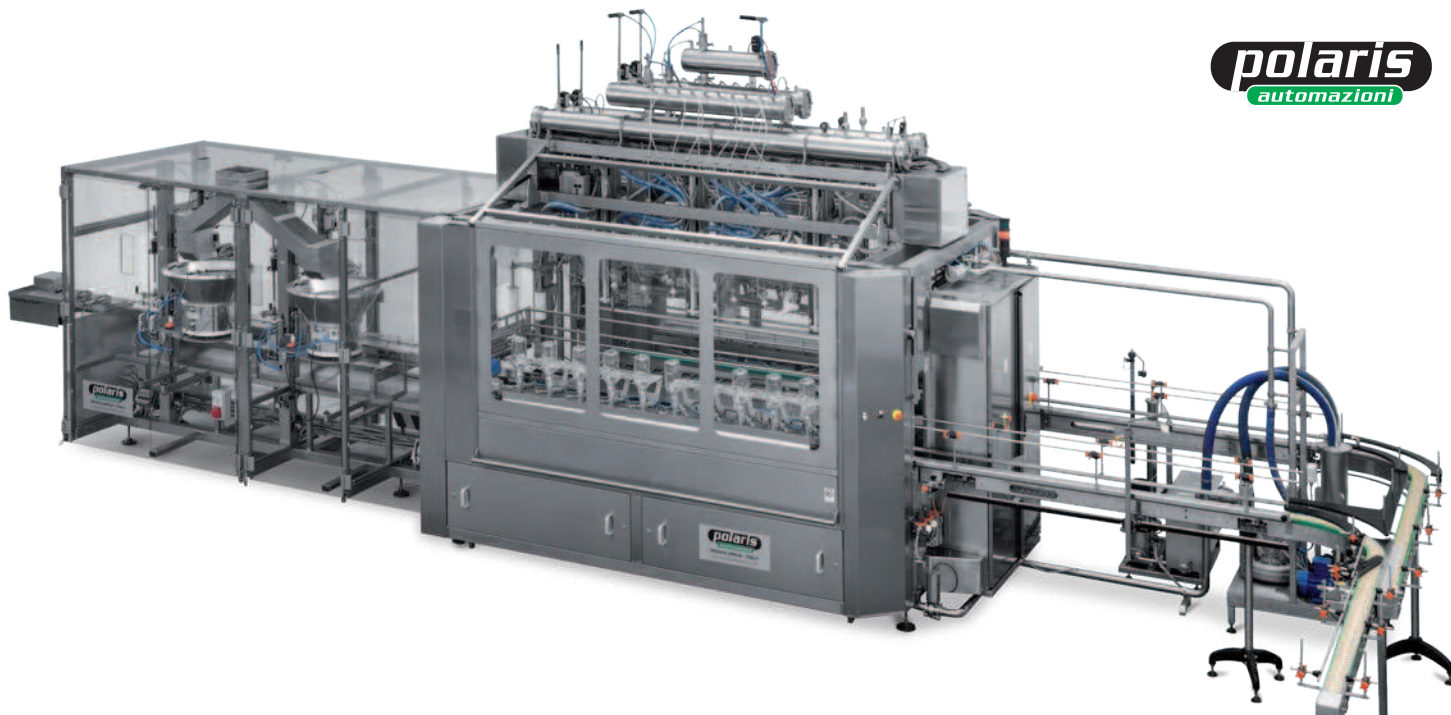
FILLER		8 nozzles
NOMINAL PRODUCTION RATE		1000 bottles/hour
BOTTLE DIAMETER or WIDTH	min / max	40 mm / 170 x 120 mm
BOTTLE HEIGHT	min / max	140 mm / 380 mm
SUITABLE LABELS roll of self-adhesive	L min/ H max	150 mm / 200 mm



B6/B6L

Automatic bottling line

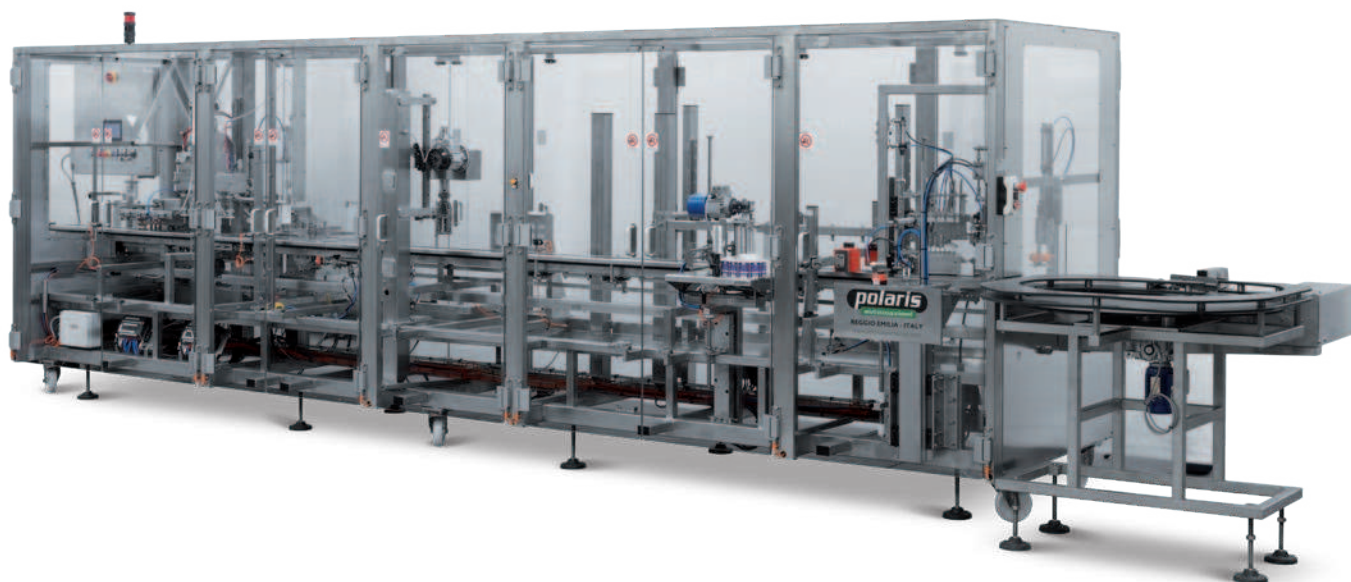
		B6	B6L
FILLER		10 nozzles	10 nozzles
NOMINAL PRODUCTION RATE		1100-1500 bottles/hour	1100-1500 bottles/hour
BOTTLE DIAMETER or WIDTH	min / max	40 mm / 120 x 120 mm	40 mm / 170 x 120 mm
BOTTLE HEIGHT	min / max	140 mm / 380 mm	140 mm / 380 mm
SUITABLE LABELS roll of self-adhesive	L min/ H max	140 mm /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



B12

Automatic
bottling line

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



BM1500

Automatic
bottling line
Mignon bottles

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

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