

Used Isobaric Complete Bottling Line for Still and Sparkling Wine up to 4500 bph

Machine type:	Complete Bottling Line
Ref:	LC579
Speed:	3500 Bottles/hour
Condition:	Ready For Operation
Formats:	1.5 L, 750 ml, 1 L
Containers:	Glass
Products:	Wine (Sparkling), Wine (Still)

Technical details

Fill type:	Isobaric	Safety features:	Yes
Manuals:	Yes		

Description

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This complete bottling line has been designed and configured to provide a high-quality, consistent filling process for both still and sparkling wines. Built around an isobaric tribloc system, it integrates rinsing, filling, and capping functions in a continuous flow, ensuring excellent efficiency while maintaining product integrity. The line is currently set up for still wines at an output of **4,500 bottles per hour** and for sparkling wines at **3,000 bottles per hour**.

It is already technically prepared for sparkling wine production and only requires the addition of a mushroom corker, a capsule applicator for spumante hoods, and a heating tunnel if needed.

The system is equipped with dedicated conveyors, a centralized lubrication system, and separate control panels for conveyor management, enabling straightforward maintenance and integration into existing plant automation. The entire layout follows a linear configuration, optimised for space utilisation and ensuring smooth product transfer between each stage without unnecessary accumulation points.

Bottling Process and Core Machinery

At the start of the line, empty bottles are automatically fed into the system via a depalletizer. This equipment gently lifts and transfers the bottles onto the feeding table while maintaining their integrity. Bottles are then directed to the tribloc system, where three key operations are performed in sequence: rinsing, filling, and capping.

The **isobaric filling technology** ensures precise fill levels and consistent carbonation retention for sparkling wines, while also being perfectly suited for still wine bottling. The filling valves are designed to minimise oxygen pickup, which

is crucial for preserving the wine's sensory qualities and shelf life. The rinser operates with clean water or a sanitising solution, ensuring bottles are free from contaminants prior to filling. The capping turret, currently configured for still wine closures, applies either BVS screw caps or traditional corks, depending on the selected format.

A dosing unit for gum arabic is integrated into the line. This system allows for precise addition of stabilising agents post-filling, which helps maintain wine clarity and prevent precipitation during storage. A dedicated steam generator (vapouriser) is included for both line sanitisation and, when required, pre-heating applications.

Prior to filling, a microfiltration unit is positioned to ensure that the product entering the tribloc meets the desired microbiological standards. This step is essential for ensuring product stability and quality without the need for excessive chemical preservatives.

Downstream, bottles are transferred to the labelling station. While the labelling unit is supplied by a third-party manufacturer, it is electrically integrated into the line and can be configured for multiple label types, including adhesive and cold-glue systems. The conveyors are built with stainless-steel frames and modular belts, fully washable and fitted with automatic lubrication points. Power is supplied to each conveyor section through individual drives, and the line control allows synchronisation of speeds to prevent accumulation stress on the bottles.

The end of the line layout includes provision for a future accumulation table, allowing additional buffering capacity between labelling and case packing. While the current scope does not include case packing or palletising equipment, the output height of 5,000 mm for the conveyor system is compatible with automated end-of-line systems.

Formats and Handling Capabilities

The line is versatile and engineered to handle a wide range of premium bottle formats. Current format capability includes:

- Bordolese Standard TS/BVS
- Bordolese Conica TS/BVS
- Conica Elite TS
- Nobile TS
- Authentique TS
- Borgognotta TS
- Adriatica 1 Litre TS/BVS
- Arno 1.5 Litre TS

Format changeover kits are available for these bottles, allowing the line to be reconfigured efficiently for different product runs. The handling parts are designed to ensure correct centring and stability during the filling and capping process, which is particularly important for taller formats such as the Arno 1.5 L.

The isobaric filling system is compatible with wines of varying carbonation levels, from still wines to fully sparkling wines. Bottle neck handling is adaptable for different closure types, including BVS screw caps, straight corks, and, with the additional equipment, mushroom corks for sparkling wine. The conveyor system and starwheels are dimensioned to ensure precise handling, avoiding scuffing or breakage.

Construction, Automation, and Integration

The bottling line is constructed predominantly from stainless steel AISI 304, providing corrosion resistance and ensuring compliance with hygiene standards required in the wine industry. All contact parts are made from food-grade materials, and machine guarding is transparent for easy monitoring of operations while maintaining operator safety.

The electrical system features separate control cabinets for the conveyors, independent from the main machine PLCs. This separation allows easy maintenance and minimises downtime during service interventions. The conveyors are equipped with frequency-controlled drives to allow speed synchronisation across the entire line, ensuring smooth flow without bottle collisions.

A central lubrication system supplies critical moving parts, significantly reducing manual maintenance requirements. Safety interlocks are installed on all main access points, in compliance with CE safety standards.

The depalletizer, tribloc, dosing system, vapouriser, and microfiltration unit are mechanically and electronically integrated, allowing for full line operation from a single control interface. The layout has been optimised for linear flow, with direct transfers between machines and minimal floor space requirement, yet allowing sufficient access for cleaning and maintenance.

This Used Isobaric Complete Bottling Line for Still and Sparkling Wine up to 4500 bph combines mechanical robustness with operational flexibility. It is suitable for wineries requiring medium-scale production with the capability to switch between still and sparkling wines without significant downtime. The current configuration prioritises product quality, hygiene, and adaptability to various premium bottle formats, while its structural and automation features make it a reliable, serviceable solution for long-term use in a professional wine production environment.