

BUCHER
vaslin



 **Bucher Inertys**[®]

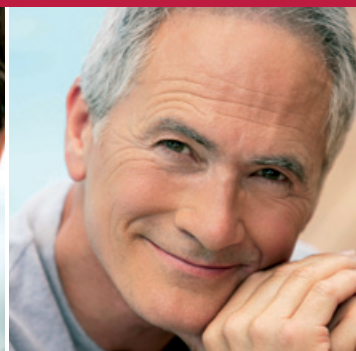
**Bring out the aromas in
your wine.**

Modern consumers seek pleasure wines that are fresh, fruity, aromatic...

The greater the wine's aromatic intensity, the greater the consumer's appreciation.

So, to seduce consumers, easy-to-drink and fruity-tasting "seduction" wines must be produced.

For more information on consumer expectations:
www.bucher-inertys.com

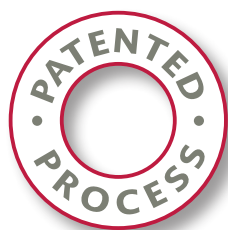




... bring out your grape's full potential with OXYGEN-FREE pressing.

Bucher Inertys® process protects must from oxidation.

Colour, typicality and aromatic potential as always are the promise of fault-free pleasure wines to meet consumer tastes.



Aromas, what are they derived from?

Aromas are caused by molecules made up of volatile compounds that are formed to a large extent during fermentation. Some, like volatile thiols, are derived from must in the form of odourless precursors. They become aromatic during fermentation thanks to the action of yeasts.

Yet the must has to be free from any compound oxidized at the time of fermentation.

Oxygen, aroma's archenemy.

The contact of the crop with air provokes oxidation of polyphenols that generate quinone. During fermentation these oxidized compounds downgrade the aromas irreversibly. If the must constituents are protected from oxidation and especially from grape oxidation inhibitors (glutathiones ...), they bestow an undeniable complement of quality and longer aromatic stability on the future wine.

Protection from oxygen, how?

Pressing, the key phase.

Pressing is a crucial phase in the elaboration of white wines and rosés. The aim is to extract the best from the grape. During that extraction phase, the juices are exposed to a large volume of air, especially during crumbling operations.

Oxidation in the press is intense if it is not controlled.

Juice browning bears witness to that. The surface area of potential contact with the air in a press is considerable: roughly 3700 m² for 10 tons of grapes!

No satisfactory technique for avoiding oxidation existed until very recently. Methods for limiting oxidation in the pre-fermentation phase (such as the addition of sulfur dioxide or inert gas injection of the crop before pressing) are insufficient.

It was precisely to find a solution to that uncontrolled oxidation during pressing and therefore to offer full coherency to the chain of preventive operations that Bucher Vaslin designed and developed Bucher Inertys®, the first pressing process under inert gas with gas recycling.

This innovative and patented process ensures oxygen-free pressing.





Bucher Inertys[®], 100% of juices pressed without oxidation.

Bucher Inertys is an exclusive process of pressing under inert gas with gas recycling; it is efficient, economical and offers many advantages:

- an approved, reliable and original solution based on gas recycling,
- the only technique capable of supplying neutral gas to the press with a sufficient instantaneous flow rate,
- guaranteed total inerting: 100% of pressed must is protected,
- neutral gas and energy savings: low operating costs, fast return on investment.

With oxygen-free pressing the difference is instantly apparent.

Bucher Inertys[®], how does it work?

Pressing is performed under neutral gas with gas recycling in a flexible chamber hanging near the press. The flexible chamber volume is the equivalent of the capacity of the grape press.

During the pressing cycle, gas is transferred (e.g.: nitrogen, CO₂) between the grape press tank and the flexible chamber. The material of the flexible chamber (flexible PVC) ensures the transfer of gas without restriction of instantaneous flow rate.

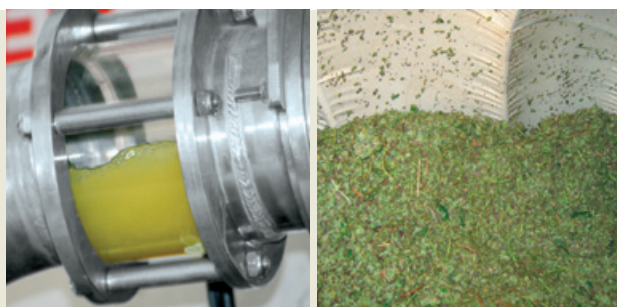
Diagrammatically, the press tank is connected to a gas flexible chamber via the juice trough. The “tank with juice trough” and “juice trough with flexible chamber” are connected together or disconnected according to pressing phases.

Must is discharged by a pump using an automatic control system integrated with the press (pump or pneumatic valve).

In the pressing stage, during pressure build-up, the inert gas is conveyed to the flexible chamber.

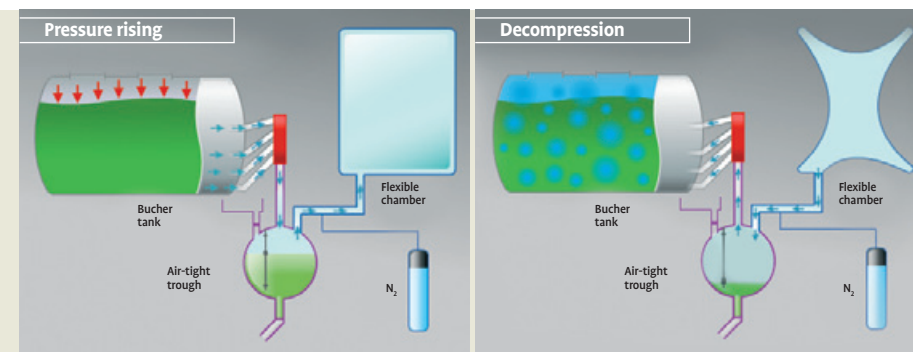
In the decompression phase and during the crumbling operation the inert gas is sucked into the wine press tank.

The Bucher Inertys[®] press can also operate as a standard press. The control panel allows the selection of the required type of operation: with neutral gas (e.g.: for white wine and/or rosé) and without neutral gas (e.g.: for red wine).



Must derived from Inertys[®] pressing

Pomace at end of pressing with Inertys[®]



Take a look at the Bucher Inertys[®] video and animatics at:
www.bucher-inertys.com

Comparison between a traditional press and Bucher Inertys®

Traditional press	Bucher Inertys® press
Crumbing or pomace breaking-up phase: The vacuum flow and the crumbing operation favour the contact between the oxygen in the air and the grapes.	Inert gas injection of the whole pressing cycle with the Bucher Inertys patented process.
The theoretical surface of contact is generally considerably underestimated: 3700 m ² for 10 tons of grapes!	The oxygen content during pressing is less than 2% of O ₂ in the tank.
Injection of inert gas in an empty tank by the direct injection of gas is inefficient and does not enable the tolerance threshold of 2% of O ₂ to be reached.	The rate of inert gas injection is the same as that of the press vacuum pump during decompression. The pressing cycle is not prolonged.
The inert gas injection in the pressing phase necessitates heavy investment in gas generators and cylinders to ensure an acceptable rate. The tank of an 80 hl press is estimated to consume 8 x 9 m ³ cylinders of waste gas for 1 pressing operation.	A flexible chamber connected to the press stores the neutral gas: running costs are low. A 9 m ³ cylinder of nitrogen is required to fill a flexible chamber of 80 hl at the start of harvest. Thereafter, the consumption of gas per pressing operation is estimated to be 10% of the volume of the flexible chamber, i.e.: a 9 m ³ gas cylinder for 10 pressing operations.

Why invest in the system?

Producteurs Plaimont (F-32) - M. Bourdet-Pees – Technical Manager

“Since 2000, “Producteurs Plaimont” have focused on a crop protection approach upstream and downstream of pressing for our high “thiol” potential varieties - Colombard, Sauvignon and Gros Manseng. Since we acquired the Inertys process in 2008, the vinification process under oxygen reduction conditions is global. Inertys is able to valorize more than 10% of juices that until very recently were processed as grape juices. We are totally convinced by the technology, results obtained are highly satisfactory.”

Vins et vignobles Dourthe - CVBG group (F-33) – M. Pouthier – Technical Manager

“Inertys is used for our Sauvignon and Sémillon white wines in respect of Pessac Leognan, Graves and white Bordeaux appellations. The process allows us to control oxidation with efficacy. The management of our grape juices by pH measurements and in compliance with taste criteria has allowed us to reduce their overall volume: down from 15% to 10% of grape juices for the 2008 vintage. That translates into a productivity gain and faster profitability from our installation.”

Domaine du Jas d’Esclans (F-83) – M. De Wulf – Owner and manager

“We were attracted to the Inertys process by the need to protect fragile oxygen-sensitive aromas. Our Côtes de Provence AOC white wines and rosés thus keep all their freshness and the colour of our rosés remains stable. We decided to integrate Inertys in a global inert gas injection approach as early as grape reception, upstream of pressing, in the fermentation tank by protecting grapes and must with CO₂. We are entirely satisfied.”

Bucher Inertys® a full range of presses from 22 hl to 450 hl.



Bucher Inertys® is now widely used across the world: in Spain, France, Italy, South Africa, Australia, Japan, etc.

Bucher Vaslin offers a full range of entirely automated presses from 22 hl to 450 hl integrating the Inertys® process.

For further information or to read press articles, download scientific articles, view animatics and the video, visit: www.bucher-inertys.com

Peace of mind The Bucher Vaslin guarantee

A local customer service is assured by Bucher Vaslin's worldwide network of approved agents. The company itself manufactures all of its products. Bucher Vaslin, the world's leading wine press manufacturer, keeps its stock of spares for 20 years. The EC marking testifies that presses comply with European directives. Bucher Vaslin S.A. is an ISO 9001: 2000 company registered through AFAQ (Agence Française pour l'Assurance Qualité).



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