



FLASH DETENTE TECHNOLOGY

ADAPT YOUR WINES TO CONSUMER DEMAND

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This innovative thermovinification process significantly improves the quality of the wines and adapts the final product to consumer demand.

Testimonial

The Flash Detente process is a very useful invention for us. This technique has enabled us to modify the profiles of our wines, making them fruitier and rounder and perfectly suited to the tastes of the world market. We are delighted with all the technical possibilities that this technology offers!

Gonzalo Carcamo
Chief winemaker
Viña La Rosa, Chile



20 t/h vacuum chamber with condenser



Vacuum chamber 7 t/h, with condenser



WINE PROFILES ADAPTED TO MARKET DEMAND

- Rounder, fuller, fruitier wines
- Stability of colour and aromas
- Denaturation of harmful enzymes (laccases, polyphenol oxidase, etc.)
- Wines obtained that are less sensitive to oxidative changes
- Grape potential revealed



OPTIMISATION OF THERMOVINIFICATION MANAGEMENT

- Less reassembly, less work
- Better temperature control during fermentation
- Fermentation volumes up 25% with the same amount of energy
- Easier to empty the tank (if vinification in liquid phase)
- Better cooling exchange during fermentation



CONTINUOUS PROCESS FROM 3 TO 30 T/H

- 24-hour operation possible
- Continuous process until alcoholic fermentation
- Reduces heating costs through greater flexibility in harvest dates
- Improves the cellar's capacity to produce new styles of wine or juice
- 25% increase in fermentation capacity with equivalent energy input



SIMPLE PROCESS CONTROL

- PERA programmable logic controller (PLC)
- Simple and intuitive touchscreen interface



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HOW IT WORKS

The “Flash Detente” thermovinification process works by quickly heat-treating the grapes at a high temperature, then immediately cooling them by pressure reduction.

1 - HEATING OF THE GRAPES: TWO TOOLS AVAILABLE

- Dynamic coaxial heat exchanger
- Gulfstream

The harvest is heated to a temperature of 85°C.

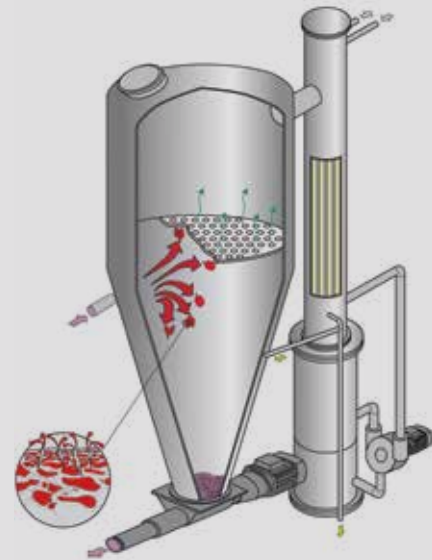


Dynamic coaxial heat exchanger

Gulfstream

2 - VACUUM

The heat-treated harvest is continuously fed into the vacuum chamber. That chamber is subjected to a high vacuum which almost instantly cools the harvest. The steam this generates is condensed. Condensates and drained juices are reintroduced into the pump.



Flash Detente 30 t/h

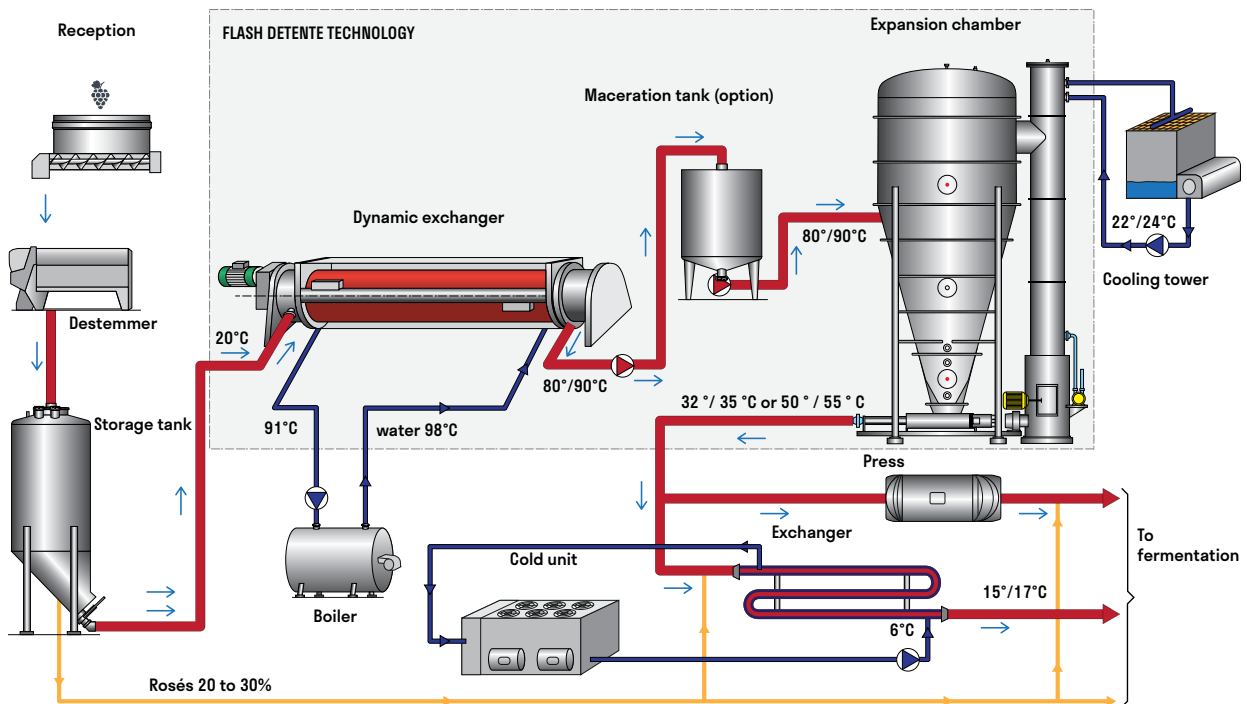
OPERATING THE EQUIPMENT

The process is entirely controlled by a PLC which regulates the temperature at the outlet of the heating chamber according to the type of vinification chosen (hot pre-fermentation maceration: 70°C, Flash Detente thermovinification: 85°C).

A simple and intuitive touchscreen interface enables the operator to control the various operating parameters (temperatures, maceration time) and informs the operator of any operational problems.



Thermo screen



RESULTS

Compared to traditional techniques, the Flash Detente process significantly increases the quantity of extracted dyes, the polyphenols and the polysaccharides. The wines produced have more colour and are fruitier and rounder, with no reduction in the tannin structure.



STANDARD PROCESS
Traditional vinification



FLASH PROCESS
Grapes fermented after flash

MODEL	CAPACITY
FDT - 10	10 t/h
FDT - 20	20 t/h
FDT - 35	30 t/h