



## ÆNOSM'ART

### GET THE BEST OUT OF YOUR FRUIT!

—

**This innovative thermovinification process significantly improves the quality of the wines and adapts the final product to consumer demand. CenoSm'art has been developed to meet the needs of users with its versatility.**

#### *Testimonial*

*This is a great step forward for winemakers. Flash Detente technology is now available to cellars with small harvest volumes to process. For many years now, Flash Detente technology has demonstrated its usefulness in producing quality wines adapted to the demands of consumers around the world. With all the elements combined onto mobile skids, they are easy to install in small producers' facilities and can thus help deliver a good service. So CenoSm'Art is a new winemaking tool which makes Flash Detente technology available to everyone.*

**Camille Vallat**  
**Vignobles VALLAT**  
Occitanie (34)– FRANCE



Mobile installation



Vacuum chamber and condenser



Simple and intuitive automatic control system



Heated harvest injected into vacuum chamber



### AN EXTRACTION THAT REVEALS THE POTENTIAL OF THE GRAPE

- Rounder, fuller, fruitier wines
- Stability of colour and aromas
- Denaturation of harmful enzymes (laccases, polyphenol oxidase, etc.)
- Grape potential revealed
- Significant reduction in spoiled grapes problems
- Better incorporation of yeasts: optimised fermentation kinetics



### SAVINGS ON THE HARVEST COOLING PROCESS

- 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)
- Multifunction: either traditional thermovinification or Flash Detente
- Recover value of spoiled or non-mature grapes
- Production of wines with a profile adapted to market demand



### OPTIMISATION OF THE EXTRACTION PROCESS

- Continuous process until alcoholic fermentation
- Improves the cellar's capacity to produce new styles of wine or juice
- 25% increase in fermentation capacity with equivalent energy input
- In-line enzyme injection at the outlet of the vacuum tank for optimised efficiency



### SIMPLE PROCESS CONTROL

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

## 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 - HARVEST FEEDING

The harvest pump with a drainage hopper allows the fresh harvest to be fed into the heating system.

### 2 - HEATING THE HARVEST

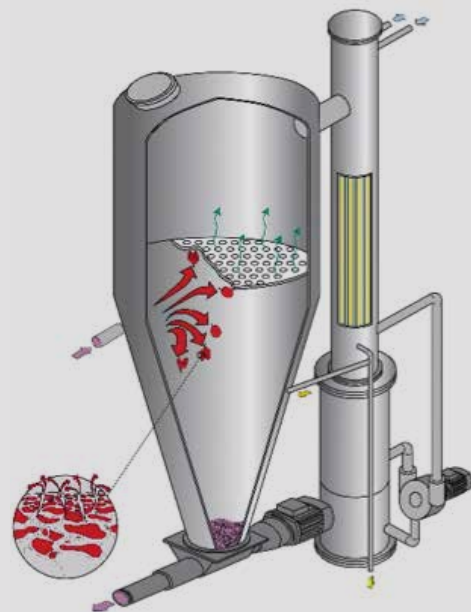
The harvest is fed into the exchanger to be heated to 65°C for thermovinification, or to 85°C for Flash Detente.

### 3 - 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.



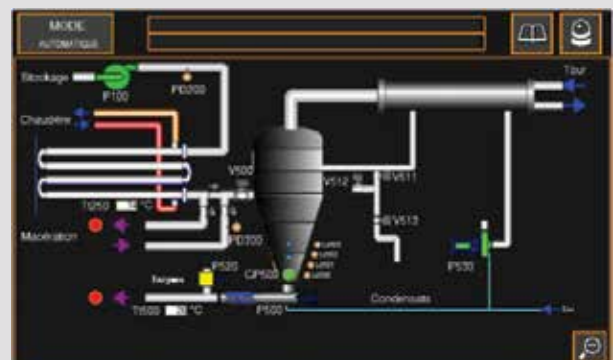
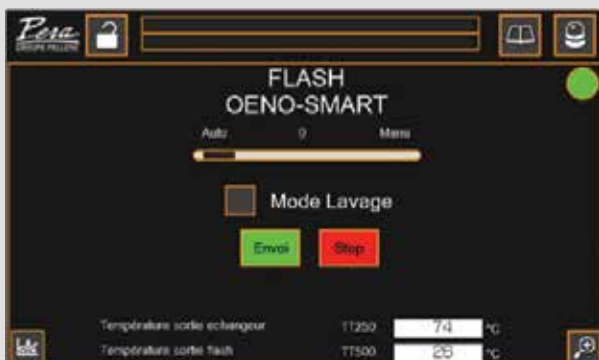
Feeder pump



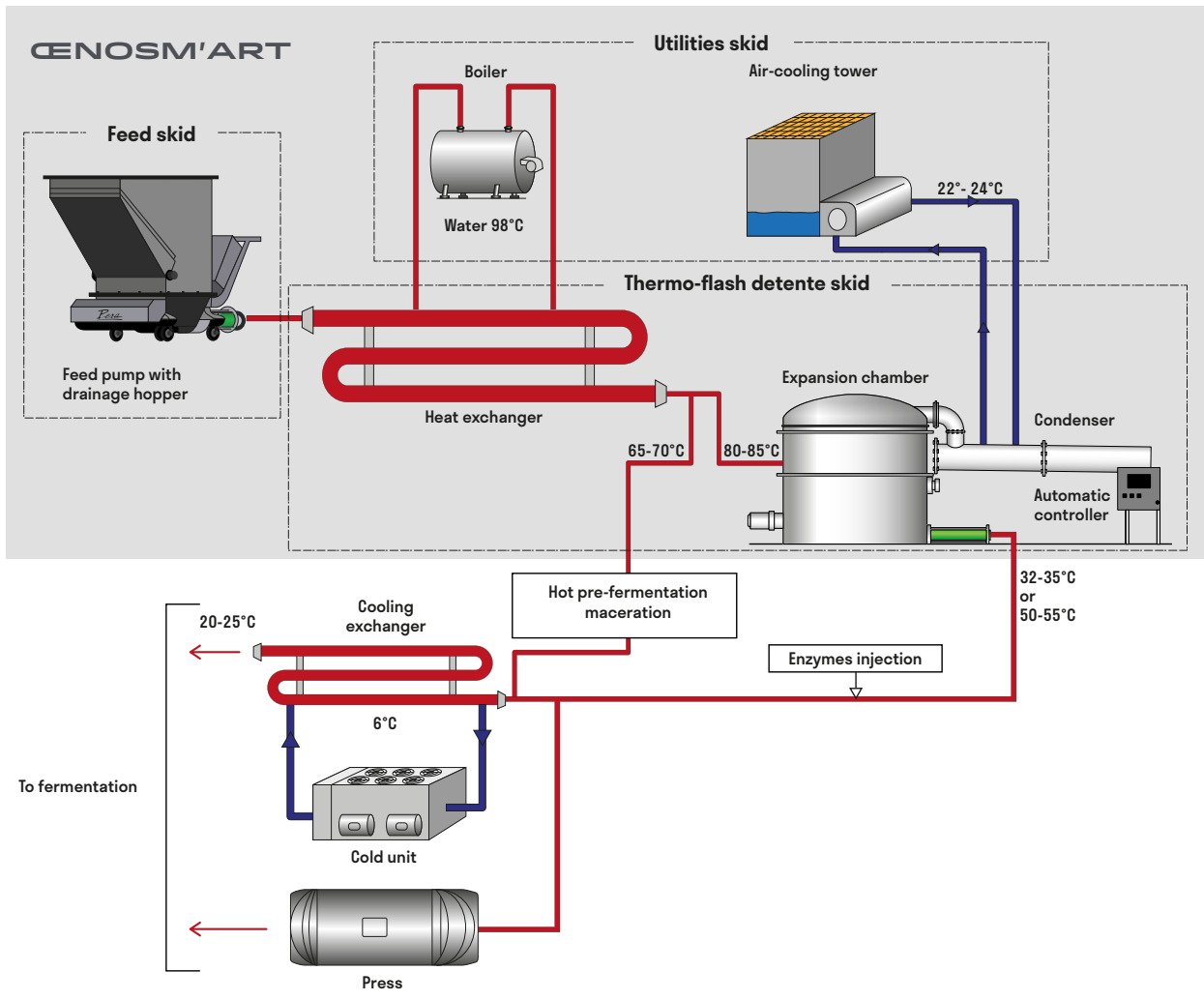
Vacuum chamber and condenser

## CONTROL

EnoSm'Art is controlled via an intuitive touchscreen interface that allows all temperature and pump operating parameters to be set.

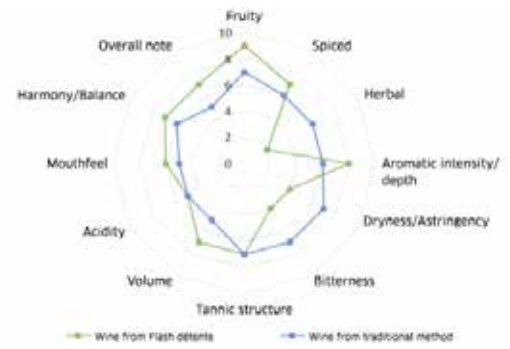


Intuitive touchscreen interface



## RESULTS

CenoSm'Art improves extraction of the grape compounds, anthocyanins, tannins, polysaccharides, and removes plant compounds.



Sensory profile – tests carried out in 2016 on a Syrah harvest

## TECHNICAL FEATURES

CENOSM'ART				
	CENOSM'ART 3		CENOSM'ART 8	
	Feed skid	Flash Detente skid	Utilities skid	Flash detente + air cooling tower skid
Flow rate*(t/hr)	Up to 10t/h	3 t/hr in flash (heating to 85°C) 5 t/hr in thermo (heating to 65°C)	/	3T/h in total flash mode 8T/h in enzymatic flash mode
Length (mm)	2,500	5,850	3,900	4,500
Length (mm)	900	2,300	2,100	2,500
Height	1,550	2,250	2,250	3,200

\*Flow rate depends on the temperature of the harvest in the feed, the condition of the harvest, and the solid-to-liquid ratio of the harvest