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D.O.Ca. RIOJA

- More than 60.000 hectares.
- Influence of 3 climates (Continental, Atlantic and Mediterranean)
- Amplitude of soils and heights, which gives an incredible diversity



Bodegas RODA

- 1987 marks the starting point
- Owners: Mario ROTllant & Carmen DAurella
- The technical team has a very important weight in the winery
- A modern construction (built in four stages, 1991, 1996 and 2000, 2019)
- In the heart of the most traditional neighborhood of Rioja: El Barrio de la Estación.
- The classic and the modern (a 19th century draft on which a winery was built 21st century)





PHILOSOPHY

- We want our wines to show the essence of the place. Rioja landscape.
- SUSTAINABILITY
- Elegance
- RODA is committed to R + D + i as the engine of progress..



- Goblet or bush vine systems: traditional viticulture methods in Rioja
- 120 hectares, 70 of them ours. They are classified in different vineyards
- Sustainability
- 550 clones of Tempranillo
- Two Tempranillo ripening profiles: red fruit and black fruit
- We mostly work with vineyards over 30 years old
- R + D + i



SUSTAINABLE VITICULTURE



SHIP2FAIR IS BORN

- RODA'S ROLE IN THE PROJECT: DEMOSITE
- WHY - WHAT DOES RODA BRING:
- RENEWABLE ENERGY.
- USE OF SOLAR-THERMAL ENERGY TO GENERATE HEAT and **COLD**.
- INTEGRATION OF VACUUM TUBES IN THE WAREHOUSE ARCHITECTURE: CARING FOR THE **AESTHETIC** OF THE FACILITIES.
- DECREASE IN ENERGY EXPENDITURE.



COLD SOAK 7°C

ALCOHOLIC
FERMENTATION
(Exotérmica 30°C)

MALOLACTIC
FERMENTATION 20°C

AGEING 14°C
-80%hr

STABILIZATION (5°C)

CLEANING &
DISINFECTION



- COLD soak
- Wild yeasts
- French oak vats. Great thermal inertia



MALOLACTIC FERMENTATION

All our wines undergo Malolactic Fermentation in French oak.

We installed a UNDERFLOOR heating system to have a temperature of 20°C.

Once the malolactic fermentation is finished, the windows are opened and the north wind enters to lower the temperature (stabilization).



AGEING



AGEING

Instalamos un sistema de refrigeración por SUELO REFRESCANTE para tener una temperatura de 13°C en el periodo estival (estabilización).



AGEING

CONTROLLED HUMIDITY



Processes: heating and cooling oriented to wine fermentation and stabilization.

Site: Haro, La Rioja

Country: Spain

Longitude: 02°50'46.7"W

Latitude: 42° 35'08.7"N

GHI: 1,641 kWh/m²@35°

Add equipment: Absorption chiller

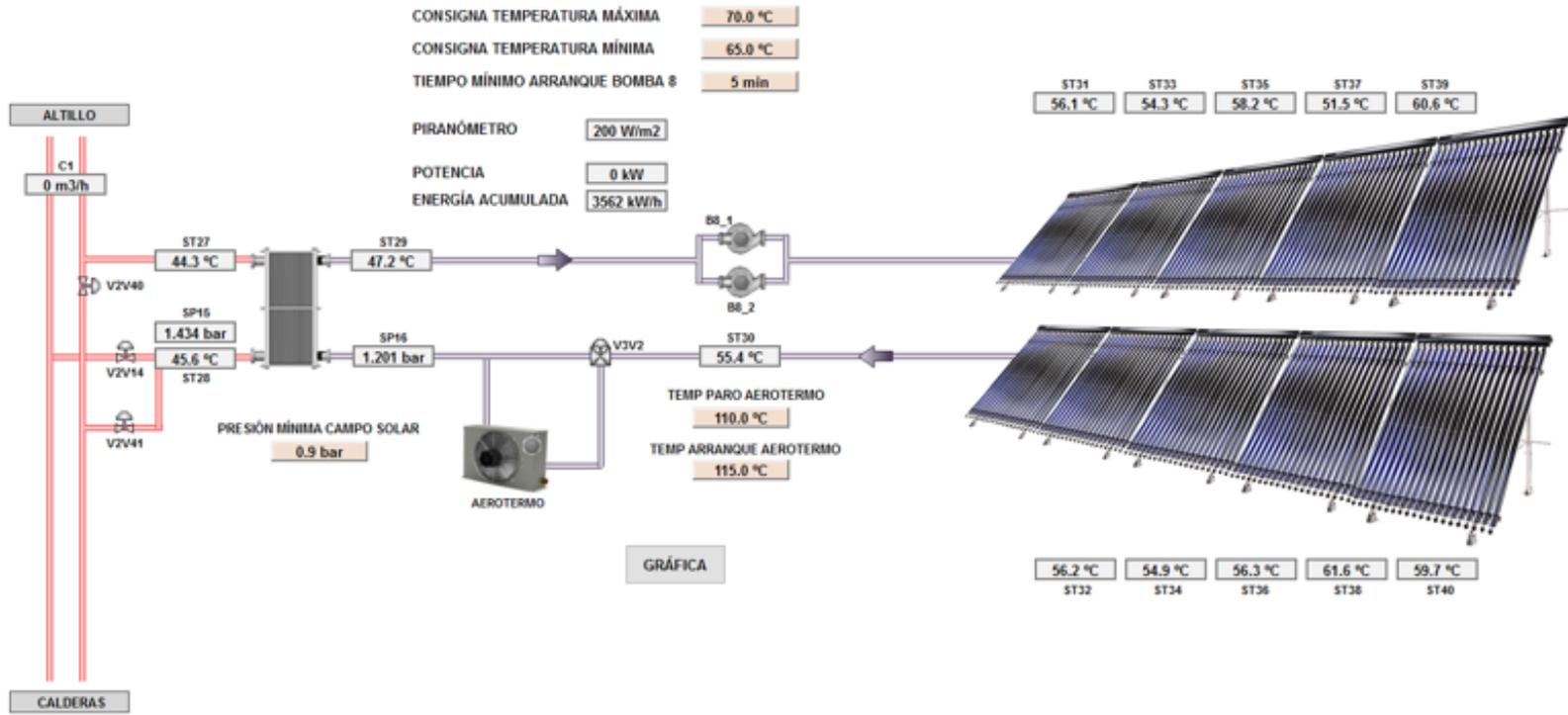
Space opportunities: the site has availability of around 100 m² of rooftop, which is located approximately 100 m away from the plant.

Cooling demand is covered by chilled water produced at 7°C and variable pressure depending on the machine involved. Also a secondary system is present. In addition, heating is produced in form of water at 45°C and pressure of 1.5 bar. The system is monitored through a Siemens automaton monitoring system.

The selected processes are responsible of a high percentage of the total energy consumption of the factory. In particular, heating needs are covered using LPG as a fuel and are considered to be constant at monthly and daily scale during the heating period, i.e. from October to March. On the other hand, regarding cooling, the total demand is currently covered by an electric chiller.

SOLAR PRODUCTION

PRODUCCION SOLAR



WHAT IS SHIP2FAIR GIVING US; EXPECTATIONS:

- PROS:
 - SUSTAINABLE PROCESS.
 - IMPROVING THE ENERGY EFFICIENCY OF THE VINIFICATION-STORAGE / AGEING PROCESS.
 - DECREASE IN ENERGY EXPENDITURE (€).
 - VISIBILITY.
 - FIGHT AGAINST CLIMATE CHANGE.

WHAT IS SHIP2FAIR GIVING US; EXPECTATIONS:

- CONS:
 - ECONOMIC DISBURSEMENT FOR INVESTMENT.
 - CONCEPTUAL DIFFICULTIES. WE ARE NOT ENERGY EXPERTS.
 - DIFFERENT “TIMINGS” AMONG THE PROJECT PARTICIPANTS.



RODA'S SOLAR FIELD



Haro . Rioja Alta . España





GRACIAS
THANK YOU
MERCİ
DANKE

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