



TASTE THE INNOVATION

press kit





Partner of Innovation

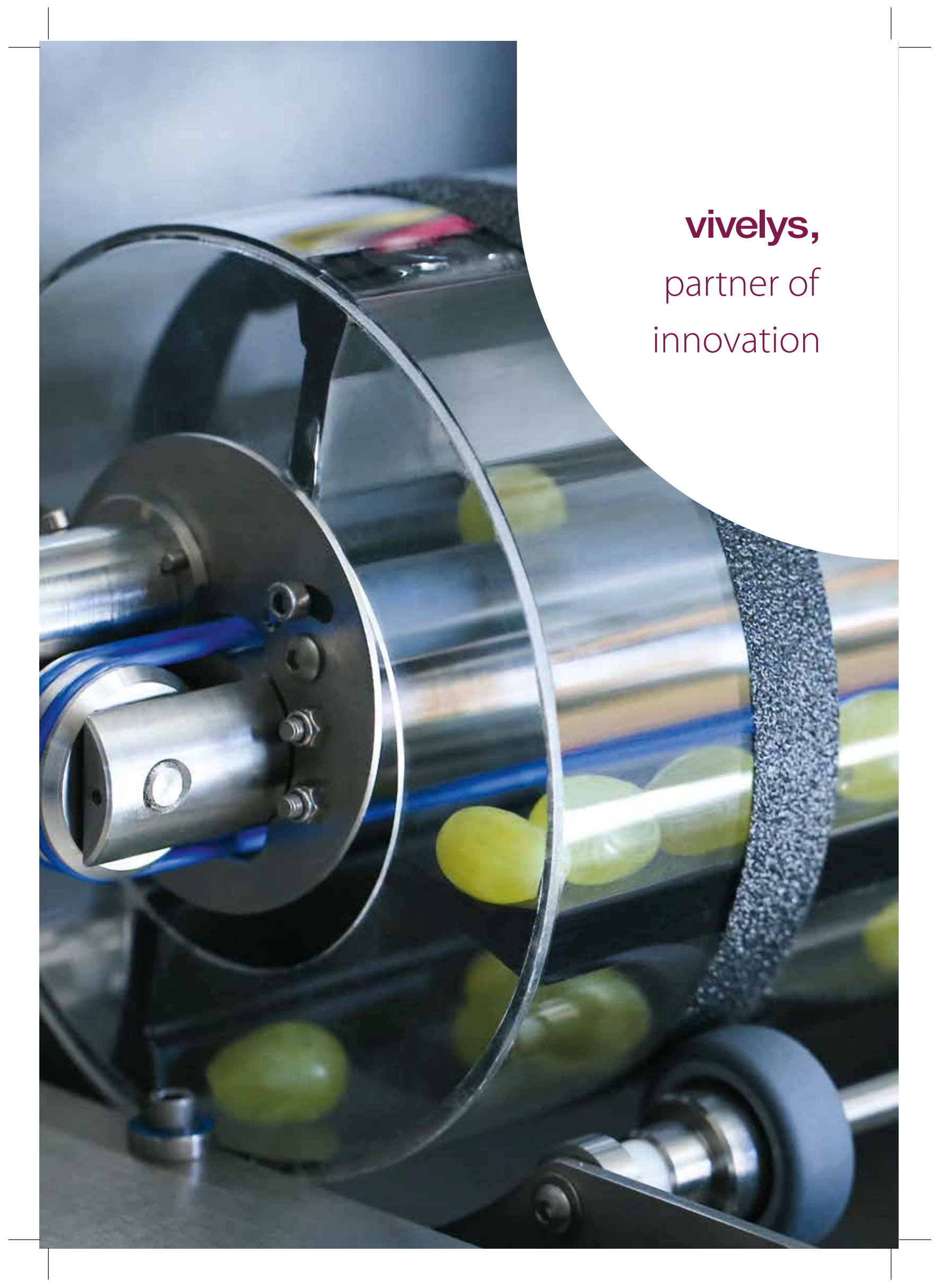
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vivelys,
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innovation



Leader in consulting and innovation in winemaking, Vivelys supports winemakers from the vineyard to the bottle to make the wine desired by the consumers, following the most adapted process.

Vivelys experts propose a new approach to optimize the means of wine production for the whole process, by always relying on Vivelys three activities:

- **CONSULTING**, for a customized global support,
- **OAK**, through a range of high quality specialized products,
- **TECHNOLOGY**, the key to innovation and production control.

Vision and values

Reveal the potential and complexity of every wine

For the wine industry, tomorrow's success depends on making wines that please consumers, and are produced with the optimal techniques.

The mastery of winemaking processes and the adaptation of wine profiles to the market's demands are the key to success. Vivelys offers its clients a new approach to these issues and optimizes winemaking, from vineyard to barrel, making the most adapted wine profiles.

For that purpose, Vivelys relies on a high-performance R&D and on its experience working for more than 10 years in different countries.

Innovation

Leader in precision oenology and viticulture, Vivelys is a pioneer in several areas of expertise:

- Micro-oxygenation (1st world patent)
- Oak chips (innovations DC310, SC100 and Signature range)
- Cellar management system (1st solution in the market - Scalya®)
- Decision-making tool for the vineyard (1st global database - Dyostem®)

A truly innovative partner for winemakers, Vivelys develops solutions that keep up with changes and new trends.

The company invests 10 to 15% of its turnover in Research and Development.

Excellence

Seeking for excellence applies to every Vivelys activity: precision in research, rigor in terms of quality, precision in new developments and choice of technologies, and customized support to its clients.

Passion

Wine is Vivelys' passion, both for the pleasure of tasting it and for the magic in making it. Vivelys tries to understand it better every day to make the best out of each wine.

Active listening

It is a priority For Vivelys, to listen to its clients, to share ideas and to build a transparent relationship. Trust is essential to define with each client the project that best matches their needs, its goals and prerequisites.

For Vivelys consultants, trust is also earned by passing their know-how and knowledge to their clients to obtain results.

Activities and offices

Activities

• CONSULTING

Exclusive support

Vivelys helps actors of the wine industry to define and manage their production strategy to obtain every vintage the best wines that respect their business model.

Vivelys offers five workshops "from the vineyard to the bottle":

- Vineyard
- Winemaking
- Aging
- Microbiology
- Sensory evaluation

Vivelys provides a global expertise that ensures consistency between every wine thanks to its assets:

Team of experts

Our team of engineers and oenologists is at the winemakers' service to answer their issues, to adapt to their technical and economic environment, and to build tailor-made projects with them according to their goals..

Méthodology

Vivelys' methodology is based on both its winemaking know-how and its R&D. Projects are carried out step by step, from the definition of the needs to the actual application, making use of tested diagnosis and analysis tools.

Innovation

The offer of innovative equipment makes decision-making and monitoring easier. This exclusive technology developed thanks to R&D is proposed according to the project's needs.

Know-how transfer and autonomy

Vivelys is committed to leave clients autonomous to ensure that post-project results are sustainable in time. Vivelys trains its clients to decision-making models, to the specific know-how acquired during the project, and to the technical solutions implemented.

• OAK USE

Creator of profile

World leader in the design and production of innovative alternatives, Vivelys offers the best oak for wine aging through its premium Boisé® range of oak chips.

Pioneers in precision oenology

Pioneer in precision oenology, Boisé® offers several oak alternatives that are well-known for their high quality. Thanks to its ability to innovate and its expertise in oak and wine interactions, the brand has become, in 20 years, the global leader in oak alternatives for oenology.

Producers since 1996

Boisé® designs and produces oak alternatives for oenology since 1996 in a single location in south-western France. It controls the whole design and manufacturing processes including oak selection and maturation (a 10000-m3 field), heating, R&D, and quality control.

Innovative by essence

All Vivelys products come from our R&D and represent the most innovative offer on the market. Unequaled references such as Boisé BF, DC310, SC100, or the more recent Boisé Signature illustrate the ability to select and develop the most precise, innovative and reproducible oak alternatives on the market.

Committed to quality

Renowned for their premium quality, Boisé® products are designed after the selection of fine oak and systematic analytical and sensory evaluations. The monitoring of each batch throughout the entire process guarantees repeatable and flawless products. Boisé® products are PEFC and ISO 22000 certified, and respect ecological, economic, social and ethical standards to ensure a sustainable forest management.

• TECHNOLOGY

Innovation for wines

Innovation is at the core of Vivelys approach since its creation and benefits from permanent investments and Research and Development projects.

Vivelys offers innovative solutions to help winemakers define and set up production strategies.

Vivelys' exclusive technology is used to control and reveal the wines, covering the needs of agronomists, oenologists, quality control managers, and sales and marketing teams.

A **forerunner in precision oenology**, Vivelys aims at optimizing winemaking through managing key parameters of each step.

The know-how acquired from R&D allows to identify the most adapted technical processes and to combine them with tools that control them. Such expertise, spread worldwide thanks to our consultants, helps bringing an answer so that every wine reveals its potential.

In 20 years of innovation, Vivelys has opened a new path to a technology that serves the wine industry:

- in the cellar with the 1st world patent on micro-oxygenation (1993) and the 1st solution for winemaking management, Scalya® (2012)

- in the vineyards with Dyostem®, a decision-making tool to monitor grapes profiles and harvest time (2006)

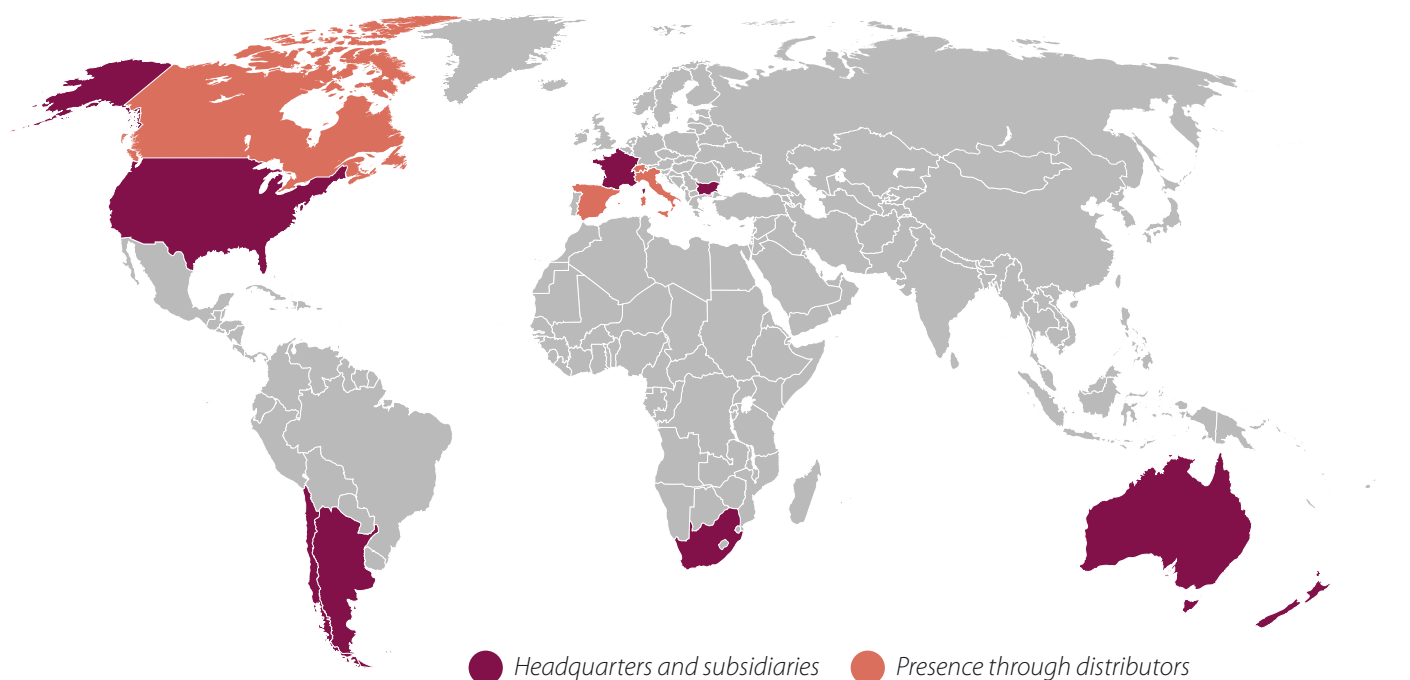
- in microbiology with a complete solution for Brettanomyces detection and enumeration (2004)

Nowadays, Vivelys has a unique panel of solutions for the whole process, from the vineyard to the bottle. Thanks to its transversal knowledge of grapevine and wine, Vivelys offers an expertise and tools that guarantee consistency and a global vision of all the actions taken, from the definition of the targeted wine to the operational application.

Offices around the world

Vivelys is present in more than 20 countries and generates 70% of its turnover from exports.

The company, established in France, has subsidiaries in Chile, the USA, Argentina, Bulgaria and Australia. Vivelys is also present in Italy, Spain, Portugal and Canada through distributors and operates directly in several countries.



Vivelys benefits from a network of experimental centers with two experimental wineries in France and Chile as well as partnerships with pilot wineries in several countries (France, the USA, South Africa, Australia, Argentina).

Key Dates & figures

Key Dates

1993

1st world patent on micro-oxygenation

Following several years of experiments, and with the help of INRA Montpellier, Patrick Ducournau files the 1st patent on micro-oxygenation, highlighting the phenomenon of controlled oxidation.

1995

New sensory methodology

The development of micro-oxygenation comes with the sensory description of the different types of tannin and the development of a sensory methodology for production.

The creation of Oenodev

Oenodev, a company founded after filing the patent, develops and distributes equipment for micro-oxygenation and offers technical training and consultancy, making the company a reference in the matter.

1996

Creation of the Boisé range and of its production site

Experiments are extended to oak and result in a range of premium quality oak chips, designed as complementary ingredients.

The production site aims at controlling quality and repeatability of every oak chip.

1999-2004

International expansion

The company launches subsidiaries in Argentina, Chile and the USA to ensure the acquisition of those markets, while making a comprehensive study of the local issues and specificities.

2001-2006

Control of Brett risk

A global project called "Control of Brett risk" (Maîtrise du Risque Brettanomyces), is launched jointly with several wineries from France, Argentina, Chile and Uruguay. Oenodev finances several theses on Brett risk and lees, resulting in the 1st global solution for Brett detection and enumeration adapted to production management.

2005

Characterization of the grapes aromatic profile

Sféris, a Montpellier School of Agronomy start-up and pioneer in the characterization of the grapes potential and aromatic profile, launches new decision-making tools for grapes profiles and harvest monitoring.

2008

Sféris buyout and creation of Vivelys

After the Sféris buyout, Sféris and Oenodev merge into a new company: Vivelys.

2008-2011

Project on fermentation management
The project called "Fermentations management" (Pilotage de Fermentations), run with the help of INRA Pech Rouge and Fermentis (Lesaffre group), gives birth to the 1st management solution on the market: Scalya®.

2012

Consolidation of Vivelys' offer combining consultancy, oak and technology
Vivelys keeps investing in R&D and consolidates its consultancy service from the vineyard to the bottle, while developing know-how and management tools.

2014

Integration into Oeneo
Oeneo acquires 100% of Vivelys. The deal reinforces the strong added value positioning and Oeneo's ability for technological innovation.

2015

Launch of Boisé SC100
To celebrate its 20 years, and being aware of its great ability to create unique products (BF, DC310), Vivelys launches Boisé SC100, an oak chip for more rounded wines.

2016

New dynamics
Vivelys settles in Australia and South Africa and continues its activities of development and innovation.

Key figures (2016).

Vivelys is part of the international group Oeneo, a leading figure in the wine industry thanks to its innovative and premium brands that are present in every step of the winemaking process, from the vineyard to the bottle.

VIVELYS,

20 years' experience in winemaking on international markets

60 employees, including **12** consultants

72 % of turnover generated from exports		5 subsidiaries presence in more than 20 countries
10 % of turnover invested in R&D		8 people in the research team 2 experimental centers and pilot partner wineries

Pioneer and leader in oak chips and micro-oxygenation tools

17 000 micro-oxygenation units sold

4 M hl of wine aged using Boisé

16 000 vineyard plots followed every year with our decision-making tools

1 100 000 hl managed with Scalya

33 active yeasts rooms installed around the world for **3 000 000** hl fermented with the yeasts produced

More than **20 000** microbiological analysis sold worldwide per year to **80** clients

15 audits on microbiological risk done since 2008 to ensure a global production volume of **1 000 000** hL

30 active sensory analysis panels around the world

Vivelys' clients

The volumes produced by Vivelys' clients represent more than **40** million hl, which represents **15%** of the global volume of wine produced.

13 clients produce over **1** million hl.



vivelys,
customized
global
support

Approach and methods

Vivelys offers customized global support based on a transversal approach covering the whole process, from the definition of the wine profile to its production, “from the vineyard to the bottle”.

A transversal approach...

The wine industry has long experienced a division of tasks within the same company; viticulture, oenology and sales usually working as three separate entities.

Vivelys takes a different position and proposes a transversal approach to the company organization and to the process, going beyond divisions.

Keeping the stakes of the winemaking process in mind, Vivelys makes a new approach seeking for the development of diverse wine profiles, their adaptation to the market, an improved profitability, and more effective production tools.

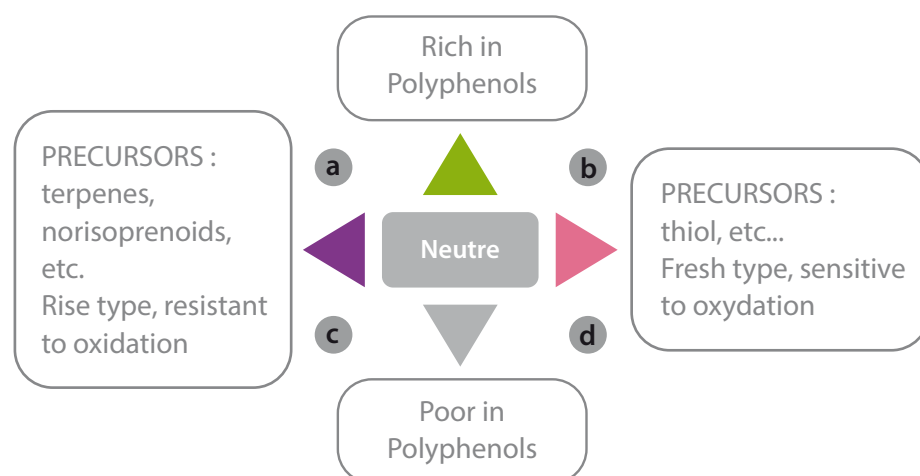
... and effective methods and working tools

In addition to technical expertise, Vivelys has developed working methods aimed at turning decision making more effective regarding production strategies.

Vivelys’ support during the project consists of three key points:

- the use of a customized methodology based on a joint decision with the client,
- the application of precise measures all along the process in order to evaluate the situation and to measure the actions taken point by point,
- the interpretation of data according to analysis models developed by Vivelys (wine matrix, grape profile, analysis of vineyard potential),

This way, clients can enhance their technical and methodological know-how. As a result, they acquire more capacity to experiment, expand their knowledge and transmit it.



The wine matrix defined by Vivelys allows a simple and technical classification of wine profiles

Know-how

A unique experimental tool

- **Experimental and pilot wineries**

Vivelys has an experimental capacity of 1000 procedures run along two annual vintages, in Europe and in the southern hemisphere (an experimental winery in Montpellier and an experimental winery run by the University of Chile).

Vivelys also has a network of pilot wineries integrating the Vivelys approach and tools, a real life-size development ground of Vivelys know-how.

- **R&D axis**

Vivelys benefits from 20 years of applied research in oenology and microbiology, and more than 10 years working on the vineyards. Vivelys has developed its know-how in many areas:

- definition of wine profiles and indicators for ripening monitoring,
- measure and monitoring of hydric activity,
- optimization and preservation of alcoholic fermentations,
- selection and production of indigenous yeast,
- wine aging and comprehension of phenomena deriving from the interaction of different aging parameters (oxygen, oak compounds, lees, polyphenols),
- Brett (contamination, identification in the vineyard, factors for Brett growth in red wines),
- control of key parameters during the different steps of the winemaking process (extraction, vinification, aging),
- sensory evaluation of the wines.

Partenariat R&D

In addition to the applied research projects carried by Vivelys, fundamental approaches are made together with public research laboratories and innovation support centers:

- Qualiméditerranée pole of competitiveness
- Experimental unit of Pech Rouge, INRA
- Le Mas Numérique
- University of Chile
- INRA Montpellier

Modeling

Modeling work represents more than 3,000 tests made over the last 10 years and more than 5,000 industrial validation tanks since 2006. The models developed by Vivelys are the cornerstones of its know-how and technological solutions.

Data provided by Vivelys is one of the most important sources in the industry:

- 16,000 plots of vine monitored annually on the grape profile,
- 1,000 plots of vine monitored since 2001 on water activity,
- 1,100,000 hl controlled in the cellar,
- more than 30 grape varieties modeled in terms of ripening, i.e. 70% of the world's wine-growing areas.

Process management

The solutions for process management proposed by Vivelys are based on the results of research work on the comprehension and management of the process key factors.

Management solutions are designed following the system Control / Sensors / Order:



- 1** The sensor(s) send(s) to the control system information about the course of the process (water stress constraint, median berry size, T °C of the must, CO2 emission, dissolved O2 concentration, etc.).
- 2** The control system processes the data and generates an instruction according to the selected production models or recipes.
- 3** The control system sends the instructions to the triggers (irrigation system, thermoregulation device, micro-oxygenator, etc.).
- 4** The instruction changes the medium characteristics. The sensor measures its evolution and sends the new data to the control, and so on.

The development of these tools mobilizes the research teams, as well as the development teams, and their skills in automation and IT.

Team & projects

Vivelys has a team of ten consultants supported by different departments:

- Research departments in Oenology, Vineyard, Oak and Microbiology (3 doctors & 1 agronomist engineer, 2 laboratory operators, 1 cellar master)
- The product managers for the Vineyards, Oenology, Oak, Microbiology and Sensory analysis poles (engineers & agronomists, oenologists and a doctor)

Increase the profitability of the mid-range wines

Example of projects:

Mission

The mid-range segment should meet very high standards in terms of quality, volume and costs.

How to maintain the quality and respect the requested volumes while optimizing production costs? One of the major Chilean wineries has turned to Vivelys to identify action levers and to define and carry out the production strategy that fits these goals.

Results

- over-classification of wines made from grapes historically affected to lower segments,
- optimization of logistics with a better distribution and prediction of the harvest,
- specialization of production through specific adapted techniques.

Key points

- sensory definition of ingredient wines that build up the final product's profile,
- co-writing of decision-making rules, technical itineraries, and monitoring elements specific to each ingredient wine,
- support in the transition from reactive to proactive production methods.

Conclusion

The expertise and tools offered by Vivelys have made it possible to respond to the problems of quality, volume and cost of the producer. The formalization of the acquired know-how and its integration into the management of tools in the vineyard and cellar guarantees the maintenance of performance over the next vintages.

Solutions implemented:

Consultancy on the production strategy / Consultancy on vineyard technical itineraries, fermentation, aging, and oak use / Dyostem / Scalya / Keryan / Boisé products / Siryel / Expert panel

A close-up photograph of a hand holding a tulip-shaped glass filled with white wine. The background is softly blurred, showing a person in a pink shirt holding a glass, suggesting a social gathering. A dark red curved shape in the bottom right corner contains the text.

vivelys,
innovative
solutions

Sensory evaluation

Optimizing tasting techniques

Wine tasting is the most important element in the winemaking system. Thanks to its expertise, Vivelys has reassessed tasting techniques, producing precise, repeatable and common evaluations of wine profiles.

Our approach

Patrick Ducournau put considerable effort into his Madiran Appellation. Then, between 1991 and 2000, he and Maurice Chassin implemented one of the first sensory analysis juries for approving appellation wines. This experience made Ducournau reconsider tasting techniques, leading to the definition of more precise evaluation tools that go further than just individual expertise. More than simply qualifying and monitoring each batch of wines by means of sensory analysis, it appears essential that a common language be created, making professional communication possible between all the key players in the company.

Our expertise

Vivelys consultants can offer their clients strategic reflection, training and support in every aspect of sensory practice and its most cost-effective integration into wineries. The tools are already almost fully developed with regard to defining the product, quality control, modelling the grape profile and setting up an expert panel.

Our solutions

A dedicated IT solution

Siryel® is composed of a digital data entry tool (a pen) and an on-line app for data management (designed in SAS – Statistical Analysis System – mode). It stands out from the other systems available on the market because:

- The instantaneous data processing makes it possible to obtain conclusions at the end of the tasting.
- The type of tasting analysis is adapted in particular to monitoring production and studying the competition.
- Reports are edited automatically and e-mailed immediately after the tasting.
- The digital pen and hard copy make it possible to simply and effectively enter data about vineyards, wineries, and laboratories.

It is the only professional tool that is both wholly dedicated to the wine industry, and fully focused on integrating the sector's requirements.

Vineyards

Piloting wine harvests and orienting grapes according to their potential.

The quality of a wine depends greatly on the quality of the grapes. However, these notions are extremely complex, given that they themselves depend on several independent factors: the soil, the year, the cultivation method, and the date of harvest..

Our approach

Quality is based on the concept of « grape profile ».

The grape profile can be defined as the capacity grapes have to produce a certain style of wine.

This is an integrative approach as it is based on a set of indicators that are the result of interactions between the vine and its environment: concentration analyses (sugar, acidity) and new indicators developed by Vivelys (active sugar loading in the grape's berries, and evolution in their color).

These indicators make it possible to monitor progression in the ripening process and identify its main phases: when the sugar loading starts and stops.

Depending on the region and variety, the grape's aromatic profile is conditioned by the number of days from when the sugar loading stops, and the sugar content at that moment.

This is an operational and predictive approach for both agronomists and oenologists. It has made it possible to develop analysis and decision-making solutions that can predict and monitor the grape profile.

Our expertise

• Assistance with selecting harvest dates:

This approach makes it possible to identify a harvest date that will optimize both the targeted grape profile and the organization of the harvest.

• A physiological diagnosis that identifies, explains and prevents problems associated with ripening:

Vineyard plots with a physiological imbalance caused by the water activity of the vines can be identified and treated immediately by means of piloted irrigation or application of a medium-term strategy for wine-growing management.

• Vineyard specialization:

Each vineyard plot has a designated target grape profile. Depending on this profile, the suitability of the terroir and the associated costs, the technical operations applied to the vineyards and in the winery can be predicted or adapted.

• Adapting approaches and solutions to the clients' needs:

One of Vivelys' strengths is that it can adapt and provide solutions to a variety of issues: Grands Crus domains that need to preserve the style and quality of their wines, wine merchants who must buy quality grapes from differentiated profiles, larger players faced who need to group together vineyard plots with similar grape profiles and plan harvest dates.

Our solutions

→ Controlling of the vine's water activity

Xilem® is ideal for controlling a vine's water activity so as to:

- maintain the target grape profile and thus the quality of the resulting wine;
- maintain a steady yield;
- pilot an adapted irrigation system, controlled as an immediate answer to water stress;
- pilot a medium-term strategy for wine-growing management, soil work, plant cover, fertilization, and green operations.

→ Decision-making solutions for harvest dates

Dyostem® is a decision-making tool for vineyards, offering a strategic diagnosis of the vineyard. Today, it is used on more than 16,000 vineyard plots, 5,000 of which are in the Bordeaux region.

The indicator developed by Vivelys (sugar loading) has become the reference grape ripening marker. The analyses and interpretations provided by Dyostem® & DyostemPlus® make possible:

- effective decision-making regarding the date of the harvest;
- physiological monitoring of grape ripening, to:
 - group together plots with the same quality potential,
 - identify plots that are physiologically imbalanced,
 - study the qualitative impact of different wine-growing practices;
- predictive determination of the grape profile, making it possible to:
 - describe and group together plots with the same aromatic profile,
 - predict harvest dates in relation to target aromatic profiles,
 - make it easier to organize the harvest and future winemaking seasons.

Winemaking

White wine extraction management

Extracting matter during pressing is a decisive operation that conditions the lifespan and aromatic profile of white wines. Vivelys has developed a system that makes it possible to both select the juice at this stage, and define an adapted treatment to ensure the stability of the white wines against oxidation.

Our approach

Monitoring extraction by means of conductivity when white wines are pressed makes it possible to separate grape must fractions that are rich in polyphenols. The latter then undergo micro-oxygenation to reduce their phenolic content, thus improving the resistance to oxidation of the resulting wines.

The amount of oxygen needed to stabilize grape juice against oxidation varies in relation to the must. Using oxygen consumption kinetics as the basis, it is possible to calculate the precise amount of oxygen needed to oxidize polyphenol acids without having an impact on the aroma precursors.

This approach helps to guarantee longer lifespans for white wines, regardless of their aromatic profile. The effects of controlled oxygenation are increasingly important as the process is moving towards aging in bottles or tanks.

Our expertise

Vivelys suggests using tools that allow you to select fractions of grape juice during pressing. This type of tool can be adapted to each raw material, and Vivelys consultants help their clients organize this workshop.

Vivelys also proposes a service in which grape must is treated by means of micro-oxygenation.

Our solutions

→ Controlling polyphenol extraction during pressing

The Néoxym® conductivity probe allows you to continuously monitor the diffusion of polyphenols in the must so that you can optimize fraction separation.

→ Calculating the oxygen needed for the must

Cilyo® analyzes the rate at which oxygen is consumed by the must, and evaluates the amount of oxygen that needs to be introduced to sulfite-free grape must in order to oxidize the polyphenols with enzymes, whilst preserving the aromatic potential.

Selecting yeast compatible with organic agriculture

As more and more wine-makers are adopting organic agricultural practices, Vivelys has developed solutions for selecting wild yeast.

Our approach

In order to produce “organic” wine, wineries must find an alternative to commercial yeast. To counteract the risks associated with spontaneous fermentation, Vivelys has developed a **protocol for select yeasts that are already present in the vineyard**. Halfway between full control and non-intervention, this “rational” approach makes it possible to ensure fermentation using strains of carefully-selected indigenous yeast.

Our expertise

For more than 10 years, Vivelys has guaranteed the **selection of wild strains on several continents and in widely varying contexts**, from semi-desert climates to more continental climates. Thanks to a wealth of hands-on experience in the field, Vivelys has become an expert in adapting its know-how to the constraints of its clients, regardless of their size or practices.

Our solutions

→ Levure du millésime (Vintage yeast)

This is a simple and easy solution. It consists of searching the vineyard for the yeast of the year that is representative of the vintage. Rather like the spontaneous fermentation technique, this solution makes it possible to choose yeast pools, thus optimizing inoculation. Vivelys provides training in the wild yeast searching technique in the vineyard and in the production of the year's starter.

→ Complete selection of wild yeast

This solution makes it possible to search for and select wild yeast at the vineyard, in accordance with the winery's production criteria. This guarantees the autonomy of the winery in terms of preserving and producing the chosen ferments.

This complete process takes place over two years and three harvests, helping winemakers to produce wines autonomously with yeast strains that represent their terroir perfectly.

Optimizing ferment management

Given that managing ferments is one of the most delicate steps in the winemaking process, and the one with the highest margin of error, Vivelys has developed solutions that help limit those errors, thus optimizing production.

Our approach

Vivelys has created the “active ferment” workshop (levain actif) as an effective means of eliminating the need to manage random fermentation situations, by guaranteeing the use of yeast strains through multiplication and controlled culture.

Our expertise

Yeast multiplication techniques are well-known and controlled in every sector involving fermented drinks. Vivelys’ expertise lies in our ability to transfer these tried and tested techniques to the field of oenology. Adaptation the techniques to oenology involved creating a process for each batch, adapted to the harvest calendar and production realities, including room for uncertainties.

Our solutions

Vivelys suggests setting up a yeast production site. There are several key advantages to this: it reduces production costs, ensures fermentation, produces wild yeast autonomously, gives freedom of choice for the yeast strains, and enhances the client’s know-how.

Controlling microbiological process and monitoring quality

Every winemaker’s goal is to produce wines of impeccable quality every year, regardless of the conditions. By offering microbiological control of wines, Vivelys provides a service that detects any irregularities that occur in the winemaking process.

Our approach

In a globalized, increasingly demanding and competitive context, winemakers must guarantee their clients impeccable, constant quality. It is therefore essential that they understand the microbiological activities governing the reactions that transform wines. Microorganisms can benefit or damage the product, depending on their nature.

Wild yeast, zero *Brettanomyces*, a higher pH, less SO₂, more residual sugar... These are the five challenges facing oenologists of today.

Combining all these elements, either fully or in part, dramatically increases requirement levels in the microbiological control of wines.

Our expertise

Controls should not only make possible global control of the winemaking process, but also guarantee the quality of the final product. Oenologists tend to face these microbiological problems alone, which contributes to their main concerns as creators of wine. The involvement of more specialized staff thus becomes necessary to help oenologists make their production processes more effective.

Our solutions

All these new constraints make it necessary to implement **protocols and tools for microbiologic analyses** within the company. Regardless of any scaling required, or the operator's initial competences, Vivelys helps the company **set up and organize a Microbiology Department that is specific to wine production**, as well as being adapted to its budget and needs.

Vivelys selects the **best-suited material**, defines **production control protocols**, and sets up **strategies for optimizing the microbiological steps and managing risks**. In this way, the person in charge will be able to understand the microbiological requirements of the profession throughout the year.

Boosting a wine's potential during the aging process

Management of alcoholic fermentation, though essential for the smooth running of the process, becomes difficult because of the constraints of time and means. In order to help wineries include this activity, Vivelys has developed a piloting solution that makes it possible to plan, carry out and control of the operational tasks involved in the fermentation process.

Our approach

The logistic constraints, additional work, and lack of a specialized workforce usually distracts the oenologist's attention from the management of alcoholic fermentation.

By means of piloting the fermentation process, Vivelys has developed a tool that performs all the repetitive tasks that have no added value for winemakers. This gives oenologists the time they need at this critical point in the winemaking process.

Our expertise

All the process tools developed by Vivelys are pre-set to ensure that the winemaking is performed in accordance with professional standards. Vivelys consultants work hand-in-hand with their clients, inputting their *savoir-faire* in the diversification of wine profiles from a given grape profile: this is creative oenology rather than corrective oenology.

Our solutions

→ Operational piloting of alcoholic fermentation

The Scalya® system works in real time, collecting data from the workshop to optimize production activities. It provides oenologists with the certainty that basic operations are being carried out correctly.

→ Injection system for available nitrogen

Piloted by Scalya®, this system makes it possible to provide yeast with the nutrients it needs, when it needs them, allowing it to develop and consume the sugar from the must.

→ Monitoring fermentation kinetics

The CO₂ sensor, within the Scalya® system, makes it possible to monitor evolution of the yeast's CO₂ emissions, and thus the fermentation kinetics.

→ Oxygen injection system

Gran Visio, piloted by the Scalya® system, makes it possible to supply precise amounts of oxygen during the alcoholic fermentation process. This contributes to better survival of yeast, or allows the wine profile to evolve.

Aging

Managing oxygen and lees in vats

The aging process is one that winemakers should not neglect, but rather pay particular attention to in terms of three key aspects: oxygen supply, the stirring of the lees, and oak management. To make these operations easier, Vivelys has developed piloting systems for both aging and the oxygen in the vats. The use of oak should be integrated from the winemaking step, not only during aging.

Our approach

With **17,000 vats equipped worldwide over 20 years**, Vivelys has from vast experience when it comes to analyzing the strengths and weaknesses of the micro-oxygenation technique.

Recent technological progress in the field of the continuous supply of dissolved oxygen has made it possible to create genuinely helpful decision-making or micro-oxygenation piloting tools.

Our expertise

Vivelys has given more than 500 seminars around the world on management models for aging by means of moderate oxygenation. We are now working on **optimizing implementation of aging techniques in vats and barrels**. Vivelys consultants help their clients organize this workshop in terms of operational resources, working methods, costs, and preservation.

Our solutions

→ Operational piloting of the aging step

Scalya® works in real time to collect data from the workshop as a means of optimizing production. This provides oenologists with the certainty that the basic operations are being carried out correctly.

→ Automated piloting of oxygen injection during the aging process

Piloted by Scalya®, this makes it possible to provide yeast with the nutrients they need to develop and consume sugar from the grape juice. Yeast is supplied with the nutrients at the exact moment it needs them.

→ Monitoring fermentation kinetics

The CO₂ sensor, which is an integral part of the Scalya® system, makes it possible to monitor evolution in the CO₂ released by the yeast, and thus the fermentation kinetics.

→ Controlled oxygen injection system

Gran Visio, which is piloted by Scalya®, helps supply precise doses of oxygen during the alcoholic fermentation process. This contributes to better yeast survival or allows the wine profile to evolve.

→ Lees stirring system

The Bâtonneur ensures that the lees are quickly and gently stirred, without degassing. This guarantees that the lees in the vats are aged effectively, and preserves the aromatic profile. The Bâtonneur can also be used to homogenize the vat when the oxygen supply is automatic.

Oak management during the winemaking process

With globalization and growing competition in the wine market, winemakers are increasingly interested in stainless steel vats, to the detriment of oak. Vivelys is a staunch defender of modern winemaking, and has developed innovative oak solutions making it possible to perfectly adapt oak to the process and the target wine profile.

Our approach

Oak is prepared depending on the desired profile. Its preparation requires considerable precision when selecting the raw material, the controls carried out, and the sensory effects desired.

Given that barrel-makers discard 4/5 of the trees they cut down, using oak from barrel-makers for winemaking plays a part in preserving hundred-year-old oak forests.

This oak also undergoes a selection process in the barrel-making industry.

It is possible to create very precise and highly varied oak blends out of different oak profiles.

Each oak blend creation adapts to every wood raw material, in accordance with analytical and sensory evaluation.

Our expertise

Thanks to Vivelys' expertise in the foreign market, it is the world leader in the field of technical oak chips.

In 2009, Vivelys' research department initiated an ambitious program to determine the basic rules that guarantee more precision in the delicate business of oak/wine interactions.

Today, that program takes up more than half of Vivelys' research efforts and makes it possible to guarantee that the company's clients obtain excellent integration of oak compounds into the various key moments in the winemaking process.

In this way, Vivelys' approach makes it possible to preserve wine profiles by create precise and customized oak blends, and define the conditions under which these blends should be used during the process.

Solutions : Boisé France®

➔ Product ranges

The 11 Boisé France® products are a set of complementary and easy-to-blend options oenologists can use as a basis for establishing their wine profile.

Of our most recent references:

- **SC100 chips**

This innovative product for the wine industry provides roundness and a smooth, creamy taste, whilst preserving the aromatic profile.

- **The new Signature range**

Two references: « Y » and « T »

Boisé Signature « Y » (Yummy) is a simple solution for providing red and white wines with roundness. It enhances the smooth, flavorful notes whilst retaining the fruity ones.

Boisé Signature « T » (Toasted) finely structures wines and intensifies their complexity, adding a variety of toasted notes.

The diversity and complementarity of the Boisé products make it possible to manage several wines during the winemaking and aging processes, from decreasing the perception of plant characteristics and increasing the ripeness of the fruit, to intensifying freshness, via structuring and increasing the fat.

Thanks to the distinctive characteristics of oak profiles, it is effectively possible to focus on certain, precise goals for the wine profile desired.

Boisé France® range of chips

		Intensity	Fruit	Freshness	Aromas	Complexity	Structure	Sugar	Fat	PAI
Fruit & balance	Fresh oak	●●	●●		●		●●		●●	
	Fresh oak flakes	●	●				●●		●●	
	Freshness		●	●●●		●	●●●			●
	SC100					●	●	●	●●●	●
Aromatic complexity	SCA	●●	●	●	●●	●●●	●●●		●	●●
	DCA	●			●●	●●●		●		●●
Aromatic intensity	SC180XL	●●	●		●●		●●	●●●		●●●
	DC180	●●	●		●●		●	●●●	●	●●
	DC190	●●		●	●●	●		●●	●	●●
	DC210	●●		●●	●●●			●●		●●
	DC310	●●●		●	●●●			●●●		●●●

→ Tailor-made products

For more complex needs, Vivelys supports its clients by providing them with customized blends based on the “KIT Bois”. These tailor-made products allow oenologists to use oak chips that are perfectly adapted to the target profile, making it simpler to manage oak during the winemaking process.

→ The industrial solution

Vivelys proposes a global approach in order to implement regular aging processes that take into consideration all the constraints (production flow, variability in the raw materials, typology of the final product).

This approach covers all the issues that can arise in oak aging :

- oak selection with the “KIT Bois”
- integration of other aging parameters (oxygen, lees)
- implementation of quality control methods.





vivelys

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