



# 20 years of *innovation*



PRESS KIT

## ■ CONTENTS

Editorial.....	p.3
<b>The company</b>	
<i>Diam Bouchage: some numbers</i> .....	p.4
<i>A company at the service of wine</i> .....	p.5
<b>Research and development</b>	
<i>The cork closure without cork taint</i> .....	p.6
<i>Main lines of research</i> .....	p.7
<i>Key dates</i> .....	p.8
<i>Controlling oxygen transfers</i> .....	p.10
<i>Increasingly natural products</i> .....	p.11
<b>Products</b>	
<i>To each wine, its own diam</i> .....	p.12
<i>Diam Bouchage guarantees</i> .....	p.13
<b>Corporate social responsibility (CRS)</b>	
<i>Our commitment to sustainability</i> .....	p.14
<i>Key dates</i> .....	p.16

## ■ EDITORIAL



In the past, the winemaker would be very wary when buying closures... and for good reason! It was not a rare occurrence, on opening the bottle, to lament the dreaded cork taint, unwelcome capillary rise, premature oxidation or even a regrettable variation in the sensory profile of the wine from one bottle to the other...

The DIAM Bouchage solution was fortunately developed in this context of technological need, in 2003.

Conceived in Céret, designed in partnership with the CEA national research center, the Diam cork closure, cleaned using supercritical CO<sub>2</sub>, provides a solution not only to the challenges of organoleptic neutrality but also addresses the issue of mechanical properties of cork inside the neck of the wine bottle.

Our “Diamant®” process enables all the molecules responsible for the wine’s sensorial deviation to be eradicated from the cork, a noble and natural material. These molecules are perceptible both in the nose and mouth, including the most dreaded, trichloroanisole, which causes “cork taint”. Moreover, this innovative process integrates, after grinding the bark, a densimetric and granulometric selection of cork that ensures perfect homogeneity and can be reproduced ad infinitum. The added value of this technological innovation is that it enables us to

produce different closure formulations depending on the sensorial profiles required by the winemaker.

*The closure, once an ordinary object, has become a winemaking tool.*

The wine breathes when it is bottled; its constitution consumes oxygen. This oxygen comes from the cork’s alveolar cells or, over time, penetrates the closure’s structure and can be found in the space at the neck of the bottle. By offering cork stoppers whose oxygen input we know how to regulate, we are providing winemakers with the possibility of refining their creations from A to Z. Their choice of formulation for the closure heralds the engagement they will have with their wine. This is an important choice that requires careful reflection as it will ensure the preservation and enhancement of years of painstaking work and patient anticipation: an authentic enological act that contributes to the winemaker’s signature. DIAM has been working with this objective for 20 years.



**Dominique Tourneix**  
CEO of Diam Bouchage,  
Knight of the Legion of Honor



## ■ DIAM BOUCHAGE: SOME NUMBERS 2023 / 2024



3 Industrial units and several finishing centers around the world

652 partners around the world, 215 in France

over 16,000 Clients

212 millions euros in sales

en 85 countries

80% export sales

Data 2023 / 2024

## ■ A COMPANY AT THE SERVICE OF WINE



### A key and committed player

The world's leader in technological cork closures, Diam Bouchage designs, produces and markets closure solutions for still and sparkling wines, and spirits. Located in the Pyrénées-Orientales region, the French company's Diam closures, Origine by Diam, Mytik Diam and Setop Diam closures are sold around the world through a network of over one hundred trusted distributors. Since the beginning of the 2000s, the company has been working alongside its clients by offering them technically outstanding closures on a par with their creativity.

The closure must safeguard the desired development of the bottled wine throughout the aging period and conserve the sought-after aromatic profile. For this reason, Diam Bouchage teams work each day to ensure the highest quality of the mechanical performance, sensorial neutrality and oxygen

control of the products in its ranges.

“ More than a simple stopper, the closure is the winemaker's last enological act ”

The cork closure maker's commitment is also reflected by the investment made by the company in all its national and international partners: enology research universities, business clusters working in the winemaking sector, professionals in the cork industry, local company consortia. Diam Bouchage is particularly attached to being able to exchange, innovate and act with all the sector's stakeholders striving for a sustainable and responsible economy.

SUBSIDIARY OF THE



In a market subject to multiple requirements, quality, innovation and tradition are often arguments that make the difference. From the vineyard to bottling, it is rare to find a group that can assist its clients throughout the whole winemaking process.

The OENEO Group, a unique community of forward-thinking experts, offers different stakeholders innovative instruments, bespoke advice and high-performance secure routes for crafting, aging, preserving and enhancing the wines and spirits that they desire.

[www.oeneo.com](http://www.oeneo.com)

## THE CORK CLOSURE WITHOUT CORK TAINT



### The inventor of cleaning cork using *supercritical CO<sub>2</sub>*

In 2003, Diam Bouchage invested in revolutionary patented technology: the Diamant® process. Using the properties of supercritical CO<sub>2</sub> to extract the volatile compounds of cork, this cleaning process eradicates the molecules responsible for sensorial deviations that can affect the bottled wine, especially the infamous “cork taint”.

Supercritical CO<sub>2</sub> cleaning was already used in other industrial applications, such as decaffeination and extracting nicotine from tobacco.

It took 7 years of research to be able to apply this technology to cork and produce cork closures without cork taint.

“

*Since 2004, the Diamant® process has been applied to all the products offered by the company and it has never failed!*

”

Each unit of Diam, Mytik Diam and Setop Diam closures is guaranteed to be free of trichloroanisole (releasable TCA < 0.3 ng/l) and delivers unrivaled organoleptic neutrality.

Continuous improvement of the DIAMANT process over 20 years has enabled us to ensure a very low annual consumption of carbon dioxide with the same unrivaled cleaning efficiency.



### How does it work ?

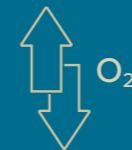
CO<sub>2</sub>, under specific conditions of temperature and pressure, will reach a state both liquid and gaseous.

This state, also called “super critical”, has the penetration power of a gas and the draining/cleaning power of a liquid. It extracts the undesirable molecules by penetrating into the core of the material.

## MAIN LINES OF RESEARCH

### A company resolutely focused on *innovation*

Since its creation, Diam Bouchage devotes significant human resources and financial means to research and development. Equipped with a laboratory covering over 300m<sup>2</sup> and an in-house Enological Hub, the company works with the most renowned universities around the world on its project studies and the development of new products. Further to the continuous improvement of the economic and environmental performances of its manufacturing processes, the company has, for several years, focused on 3 main lines of research in order to meet tomorrow’s challenges for the winemaking sector.



### Gas exchange management

The Diam and Mytik Diam ranges offer winemakers precise oxygen management when aging their wine. Every day, the company’s R&D department works to extend possible scopes in the aim of offering bespoke permeability.



### Natural raw materials

Dentro de la preocupación cada vez mayor por el medio ambiente, se estudia la utilización de nuevas materias primas innovadoras y de origen biológico en el marco de una mejora continua y del desarrollo sostenible.



### Closure esthetics

Como parte integrante del embalaje de una botella de vino, el tapón debe ser eficaz y estéticamente bello. Diam Bouchage también estudia formas de innovar en términos de presentación y marcado cada vez más precisos.

**20** patents in 20 years, 17 of which are still active

**20** people in the R&D department, with 10 working in-house



**30** Research studies underway around the world

**300m<sup>2</sup>** devoted to our R&D laboratory

**10** Different nationalities in partnering laboratories



## KEY DATES

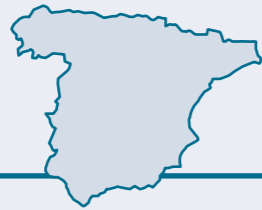
### 2004

- Creation of the Diam closure (Vinatech Sifel innovation award). After construction, in 2003, of the 1<sup>st</sup> Diamant<sup>®</sup> factory with the supercritical CO<sub>2</sub> process.



### 2010

- Construction of the 2<sup>nd</sup> Diamant processing plant in Spain



### 2013

- Launch of the Diam 30 closure for long-aging wines



### 2015

- Construction of the 3<sup>rd</sup> Diamant<sup>®</sup> processing plant in France



### 2016

- Development of the "large format" range for bottles of 3L and over



### 2020

- New addition to the Origine range with the launch of Origine Diam 5



### 2023

- Launch of the Setop Element concept by the Setop Diam range for spirits
- Creation of a new permeability for Diam 10 and Diam 30



### 2012

1 billion closures per year



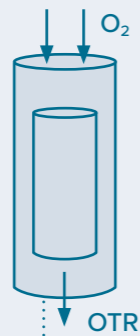
### 2018

2 billion closures per year



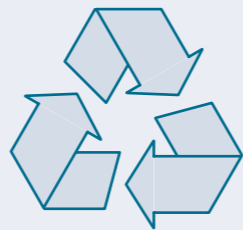
### 2005

- The first Mytik Diam closure for sparkling wines was popped



### 2011

- Invention of the first "permeameter" manometric research gauge to develop new permeabilities



### 2014

- Patent filed for recycling Diamant Oléoactif<sup>®</sup> by the cosmetics industry

### 2017

- Creation of an Enology R&D hub and the beginning of a large number of international studies

Launch of our bio-sourced Origine by Diam range (Simel and SITEVI Innovation award)

### 2021

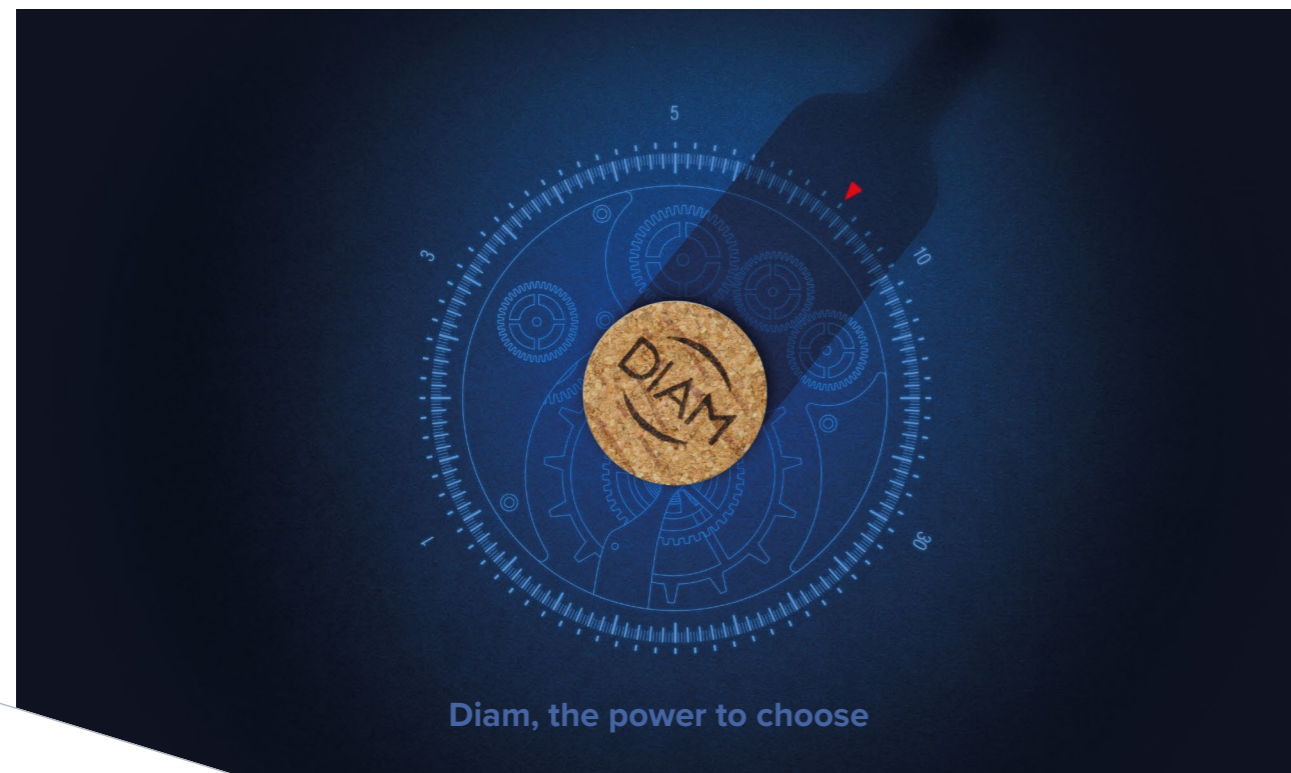
- A new closure expands the sparkling wines range: Mytik Diam 10

### 2024

- Celebration of our 20th anniversary... and still no cork taint!



## ■ CONTROLLING OXYGEN TRANSFERS



### Diam & oxygen, a breath of *innovation*

For Diam Bouchage, oxygen transfers are at the very heart of modern winemaking. Associated with works carried out at the main enology research centers around the world, Diam Bouchage has been carrying out studies for many years in order to best understand the oxygen requirements of different wines, especially with regard to grape variety, grape ripeness and SO<sub>2</sub> doses initially added.

These studies have enabled further development of various differentiated and controlled permeabilities in order to optimize wine aging and allow winemakers to reveal all the aromatic potential of their wines.

The company already offers its clients the opportunity to select their closures with different levels of permeability and with different durations of mechanical guarantee. Depending on whether the wine will be drunk within the next 6 months or 30 years down the road, depending on whether it is red, rose or white wine, depending on whether it is more or less sensitive to oxidation: the company provides its clients with a great deal of data to enable them to make their choice.

In 2021, Diam Bouchage launched a new closure, Mytik Diam 10, for long-keeping sparkling wines with a quantity of desorbed O<sub>2</sub> – called OIR – that is much

less significant than that found in traditional closures, as well as a very low OTR, with these levels being uniform from one closure to the other.

In 2023, it was the turn of its Diam range for still wines to see an addition with a new, more open permeability for its closures for long-keeping wines, the Diam 10 and Diam 30. This new permeability fosters a more rapid aromatic opening of the wine while still guaranteeing its controlled aging over time.

### What's the difference between OIR and OTR

**OIR** or Oxygen Initial Release corresponds to the release of oxygen contained in the cork cells in the bottle. It is calculated over the first 6 months after bottling and is expressed in mg.

As for **OTR** or Oxygen Transfer Rate, this flow is expressed in mg/annum. It corresponds to a kinetic transfer of oxygen through the cork once OIR has finished.

The closure's permeability takes these two data into account.



## ■ INCREASINGLY NATURAL PRODUCTS



### A *bio-sourced* range

In 2017, in a major technological breakthrough, Diam Bouchage launched the Origine by Diam® range. This never-before-seen formulation offered an even more natural closure solution to the world of wine



*This closure brings together science and nature by combining a beeswax emulsion and 100% plant-based polyol binding agent to the cork*



While at the same time ensuring that the recognized reliability of Diam® closures remains intact when it comes to security, consistency and oxygen control. Closures in the Origine range are accredited with a 4-star rating by the OK Biobased® label and have also received TÜV Austria certification, which guarantees, after analysis, the organic origin of the carbon contained in the products. This is the highest level for this certification, attributed for a carbon rate of 80% to 100%, fixed by photosynthesis, contained in the closure.

Available today in the versions Diam 5 Origine, Diam 10 Origine and Diam 30 Origine, the range will soon be extended to other closures.



### Un tapón que *sobrecicla* los materiales

In 2023, the company offered the spirits market a new premium and entirely eco-designed concept called "Setop Element". It was developed with a focus on two lines of research that are of great importance to the French cork closure maker: design and naturality.



*The head is made from materials that are usually considered as naturally-occurring waste from spirit making.*



This is a remarkable technological, esthetic and environmental breakthrough. The materials used are supplied by the distillers themselves, who are thus able to upcycle material that would usually be thrown away at the end of their production process. The origins of the Element project are firmly rooted in this philosophy of a circular environment. And the possibilities are endless! Wood shavings, whisky distillers' grains, apple pomace, lavender pomace, orange peel, etc. The Diam Bouchage teams work in partnership with each client in order to develop a specific concept.

Each closure is unique and so is each bottle: the end consumer is offered a complete sensorial experience when opening the bottle that is directly linked to the identity of the product they are about to enjoy.

## ■ TO EACH WINE, ITS OWN DIAM



### Still wines



**Diam:** Thanks to its range of products, from Diam 2 to Diam 30, winemakers have a variety of closures from which they can choose the closure with the characteristics that best suit the aromatic profile of their wine. Each Diam closure is defined by its mechanical properties and different levels of permeability.

**Diam Origine:** 3 closures in the Diam range (5, 10 and 30) exist in the Origine version, the formulation of which includes a beeswax emulsion and a 100% plant-based polyol binding agent. This bio-sourced, eco-designed range that is committed to biodiversity already exists for our bartop closures and will soon be extended to our other products.

### Sparkling wines



**Mytik Diam:** In addition to the absence of any sensorial deviation, the Mytik Diam closure offers the winemaker exemplary mechanical memory and the absence of technical defects. No more dried veins, hardening cork, burst or detached discs, incidences of pegged corks... With 2 different levels of permeability, Mytik Diam closures are also popular for their ability to preserve the clarity and freshness of your wines thanks to perfectly controlled oxygen input.

### Spirits



**Setop Diam:** the bartop closure is an integral part of the packaging and contributes to the story that the spirit maker wishes to recount through the choice of shape, material and color of the closure. This closure is the fruit of a personalized study and is tailored to adapt to the specific features of each bottle neck for perfect comfort and resistance to successive opening.

## ■ DIAM BOUCHAGE GUARANTEES

### Inflexible when it comes to its *guarantees*

Diam Bouchage provides cork closures that offer both perfect consistency from one bottle to another and control over different levels of permeability. Thanks to the DIAMANT® process, it also offers unrivaled sensorial neutrality. With over 20 billion bottles closed over the last 20 years, the company remains steadfastly inflexible when it comes to its guarantees.



#### Security

The exclusive DIAMANT® process of “de-aromatization” of the cork has never failed. Diam, Mytik Diam and Setop Diam offers unrivaled sensorial security. Freed from volatile compounds and molecules causing organoleptic deviations, every single unit is guaranteed to have no releasable TCA (< 0.3 ng/l)



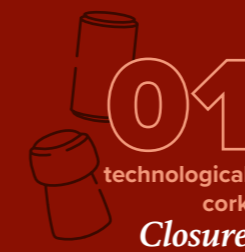
#### Consistency

For each product in the ranges offered by Diam Bouchage, the molding manufacturing process, which is also patented, ensures that all the closures have the same physical characteristics according to the formulation chosen. It guarantees perfect uniformity throughout the bottling chain and consistent aging in the bottle



#### Adaptability

Closures in the ranges for still and sparkling wines, available with different levels of permeability and durations of mechanical guarantee. They enable oxygen transfers to be controlled and their consistency to remain throughout their life span in the bottle. The Setop Diam range provides a choice of shape, material and finishing.



**01**  
technological  
cork  
Closure



**02**  
Each unit  
guaranteed  
to be free of  
cork taint



**03**  
Controlled  
gas exchanges



**05**  
Perfect aging  
consistency  
of the  
bottled wine



**04**  
Respect  
for the wine's  
aromatic  
profile



**06**  
Products  
adapted to how  
long the wine  
is kept



**07**  
Secure  
transport



**08**  
Eco-responsible  
range



**09**  
20 years of  
experience



**10**  
A French  
company

## OUR COMMITMENT TO SUSTAINABILITY



### For a positive impact on *society* and the *environment*

Commencing 2009, Diam Bouchage set up an environmental policy that is perfectly integrated in its industrial sites: today, all are ISO 14001 certified. Its approach, which is both environmental and societal, is strengthened every day thanks to the conviction and actions of its employees through numerous projects supported by the Oeneo Group. For the directors, the success of this approach entails the wellbeing of its employees, a constructive relationship with local territories and the development of an entrepreneurial culture conducive to innovation.

“Reflecting its ethical and sustainable commitment, the company was awarded gold medals in 2022 and 2023 by EcoVadis, one of the most exacting international organizations for CSE grading.”

### An ambitious *carbon trajectory*

Diam Bouchage was the first cork closure maker to undertake in 2007, an assessment of its greenhouse gas emissions. In mid-2021, it committed to an ambitious carbon trajectory that involves a 15% decrease in its carbon footprint by 2025. This objective is part of the W2DS (Well Below 2 Degrees) trajectory in the international Science Based Target Initiative. Diam Bouchage's carbon footprint in 2022 was 67,720 tonnes of CO<sub>2</sub>e. Despite a significant increase in production, the company is posting a Did you know?

#### Did you know

Every 2 years, Diam Bouchage carries out a life cycle analysis (LCA) of its products in order to calculate the carbon footprint of one closure, from the raw material to the closure's end of life (cradle to the grave).

It is estimated that the Diam closure's represents an average of just 2% of the production of a bottle of wine (75 cl).

## FOCUS ON ACTIONS IN 2023

In 2023, Diam Bouchage made numerous commitments that will not only weigh heavily on its carbon footprint in the years to come, but will also signify a real change in its company culture.



### Welcoming and fostering diversity

Following the publication of an Equality-Diversity charter at the end of 2022, all the company's managers received training. Information material was also disseminated to inform employees of their rights and to provide tools that will prevent problematic situations from arising and how to deal with any issues.



### Guaranteeing work safety

Beyond regular investments to limit risk situations, reduce occupational health issues and improve working conditions, Diam Bouchage united its employees in "Safety Culture" practices by raising awareness among teams of possible risks and safety reflexes.



### Facilitating dialogue and training

In addition to the guidance approach, a significant package of meetings and participation workshops were rolled out in order to raise awareness and train employees on various subjects : waste reduction, Climate Fresk and more technical topics such as "Closures and permeability", "Finance for all", etc.



### Accelerating energy transition

After numerous investments to reduce energy consumption, the company began several projects involving the installation of solar panels. Sunshades will also be installed in the next few months in all the car parks at its French site and a major solar energy farm is in the pipeline for Spain.



### Diminish greenhouse gas emissions linked to transport

In 2023, the cork closure maker committed to the FRET21 scheme based on the reduction of distances traveled, load optimization, and selection of means of transport that emit the least gas. Diam Bouchage's objective is to reduce its greenhouse gas emissions from freight by at least 5% over the next three years.



### Protect, revitalize and promote the forest

Today, cork oak forests are particularly fragile ecosystems. In order to sustainably preserve its raw material, Diam Bouchage has committed to an effective policy for sustainable purchases and support for professional foresters in order to protect, revitalize and promote cork: undergrowth clearing, planting, low carbon labeling, etc.

### Cork from France



The company offers its clients closures made in cork from Roussillon, Provence and Corsica. Since 2018, over 40 million Diam closures, Origine by Diam and Mytik Diam, made from French cork were sold to committed winemakers. The combination of a regional material and the Diam guarantee provides a particularly upmarket product, valued not only by winemakers but also by end consumers.





## KEY DATES



WE CARE ABOUT

*Presse*  
**Contacts**



**Anaïs Le Chaffotec**  
Marketing department  
+33 4 68 87 54 36  
lechaffotec@diam-bouchage.com



**France Auger**  
Marketing department  
+33 4 68 87 51 36  
auger@diam-bouchage.com

## *Stay tuned!*

For more details, access the digital version of our press kit in just one click, and download all available documents!

[diamcork-presskit.com](https://diamcork-presskit.com)



3 Rue des Salines,  
66400 Céret  
France  
+33 (0) 468 872 020  
[www.diam-cork.com](http://www.diam-cork.com)

