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*At TN Coopers, our products are the faithful expression of our quest
to evoke the finest aromas and flavors; to bring*

a taste of elegance

Coopering, as is winemaking, is the combination of art and science for the creation of great wines. TN Coopers permanently seeks to meet the changing requirements of modern winemaking through constant innovation of our production processes, aligning them with the particular needs of our clients, to create wines with personality.

Since winemakers expect the finest in oak products, the industry has opened to innovations in winemaking techniques, through experimentation and the application of new technologies.

TN Coopers stands out thanks to the consistent research and development of new products, leading to new and sophisticated ways of bringing wood and wine together. Thanks to this, we have become an international and prestigious cooperage, with presence in more than 30 markets around the world. —



The secret is in
how we do it

• **INNOVATION**

Through constant research and development of new products, we help create unique wines, following the specifications of every winemaker.

From the choice of the raw material to the presentation of the final product, TN Coopers takes special care of the quality demanded in each process, supported by state-of-the-art technology, and looking for innovations. Today, this allows us to offer convection toasting technology in barrels: a unique process patented by TN Coopers, which enables replicability of our products. With a more defined toasting, this allows the wood to contribute its full organoleptic potential.

• **FLEXIBILITY**

To fulfill the needs of our clients, TN Coopers offers a wide range of products from barrels, tanks, tannins and alternatives through our Origin line.

Seeking full customer satisfaction and the exact performance they are looking for, each product is tailor-made following the oenological needs and specifications of each client.

• **EXCELLENCE**

A core value for TN Coopers, excellence reflects the constant search for new and better solutions to meet and surpass our customers standards. This has led us to form R&D alliances between winemakers, our own winemaking team and our clients, and collaborating with laboratories, universities and research centers.

In addition to this, the company devotes itself to the certification, quality control and traceability of its raw materials, as well as consultancy services for our customers. —

Everything starts in
the forest

Selection of the best wood marks the beginning of a process to obtain high quality raw materials, to ultimately create wines with a unique identity.

At TN Coopers, we are convinced that terroir is as relevant for wood as for any wine, choosing the best forests to extract the finest trees.

The microorganisms, soil, sun and climate play a key role in the wood's physiochemical composition. After felling a tree, the trunks rest for several weeks on the forest floor, allowing the propagation of micro flora which contributes to the future development of aromas. Later, in the sawmill, they are cut up and dried for up to 8 months before becoming staves or merrains.

In our plant in Chile, the raw material is stored in carefully assembled wood towers, which allows for a better air circulation, and is then cured under the sun, the wind, occasional rains, and sprinkling. It is washed and dried naturally for 24, 36 or 48 months, depending on the intended product.

The purpose of this seasoning process, through a scheduled application of water and slow and progressive drying, is for chemical/enzymatic reactions to reach their optimal organoleptic quality and thus provide the desired composition.

• TYPES OF OAK

• FRENCH OAK

- *Quercus Petraea* or *Quercus Sessilis*

Given its fine grain structure and abundance of desired compounds, it is considered as superior when it comes to winemaking. With its high quality ellagitannins, it is ideal for long-term aging.

It grows mainly in the central and northeastern areas of France. TN Coopers chooses the best forests of the Allier, Nevers, Vosges and Centre areas. Certified under PEFC.

• AMERICAN OAK

- *Quercus Alba*

American oak has earned considerable acceptance among winemakers all over the world. It provides a beautiful release of aromas, which helps wines lose their astringency and hardness, making it a favorite for short and long-term aging.

TN Coopers gets its stock from the prestigious areas of Pennsylvania, Missouri, Kentucky, Ohio and Virginia.

• EUROPEAN OAK

- *Quercus Petraea*

This oak is carefully selected from forests in the Carpathian Mountains of Romania and Hungary. With its fine and medium grains, it excels at a quick release of tannic components, and delivery of aromatic freshness.



TRACEABILITY

As part of our commitment to excellence, every product that leaves TN Coopers is labelled with a unique code, ensuring complete traceability from the very forest to the wine cellars of our clients. It is possible to precisely and effectively determine: characteristics and origin of the raw material, batch, maturation, manufacturing date and parameters, grain, toasting, quality control analysis, and results. This information is kept in our records and becomes a unique code per product, allowing complete identification and tracing from its origin.

PEFC CERTIFICATE



PEFC (Program for the Endorsement of Forest Certification) promotes sustainable forest management to achieve a social, economic and environmental balance through a renewal policy.

At TN Coopers, we work with wood suppliers whose french and european woods have PEFC certification.

ISO 9001:2008 CERTIFICATION - BUREAU VERITAS:

ISO 9001:2008 (International Standard Organization) determines the requirements for a Quality Management System (QMS).

TN Coopers has been accredited under the ISO 9001:2008 norm since 2010 under INN registration number: 298.





What makes us
different

The goal of toasting is to induce molecular changes in the composition of the wood through heat, releasing aromas and flavors that enhance a wine.

At TN Coopers, thanks to our R&D program, we understand toasting as the most critical and crucial stage in the creation of wood with character. As such, we developed an exclusive and patented convection toasting technology for barrels. We toast on a hermetic, specially designed convection oven, which allows for a slow, smooth toasting with unprecedented penetration.

The main difference with direct flame toasting is that this process is controlled by an exclusive software that predicts with certainty the results of the toasting in terms of aromas and flavors. This opens a new doorway for the wine industry, as exact replication of each product becomes a real possibility.

This patented software, which controls and registers the temperatures at which hot air circulates through the convection oven, is a key feature, as it allows establishing recipes for each barrel, and offering better product selectiveness for different wines.”

Toasting methods

TRADITION

MISTRAL



Toasting:
LT / MT- / MT / MT+ / HT

In the Tradition toasting line, all our barrels are toasted by direct contact with the flame. During this process, wood experiences changes in its physiochemical composition. The concentration of compounds that are degraded in this line depends on the intensity of the toasting, with temperatures varying between 160° and 230°C.

It gives more subtle flavors in light and medium toasting, with more intense ones in high toasting. The flame provides less sweetness and structure: an excellent option for those looking for barrels with nice complexity and the preservation of fruity flavors in a wine.

CONVECTION

ODYSE



Toasting:
LT / MT- / MT / MT+ / HT
Replicable Toasting

In this line, products have a higher aromatic and taste perception. They provide great structure and a lasting mouthfeel. Their contribution of sweetness increases with time.

Convection is characterized by a direct relationship between the toasting temperatures and the wood's phenolic contribution, regardless of their botanic origin. The result: a low contribution of tannins for higher temperatures, and a higher contribution for lower ones. Of all our lines, this one provides the highest number of phenolic compounds. Sweetness can be adjusted according to the toasting recipe.

LONG CONVECTION

AMBROSÍA



Toasting:
LT / MT- / MT / MT+
Replicable Toasting

This type of toasting consists of a prolonged convection. Upon increasing toasting time while maintaining the temperatures, a softer toasting is achieved in mouth. Sweet flavors predominate initially, making way for spicy notes, which then derive into toasty and smokey hints, depending on the toasting recipe.

Structure and persistence are main traits for this toasting line.

Barrels

The wood your wine needs



• NOBLE

TN Coopers offers the combination and setup that every winemaker needs, according to their choice of aging time, tannic structure and aromatic development. —

- **FINE GRAIN (FG)**
- **DRYING:** outdoors, for a period of 28 to 36 months.

- **TYPES OF OAK:**
 - FRENCH**
100% French Oak, certified under PEFC.
Native to Allier, Neves, Vosges and Centre.
 - AMERICAN**
100% selected American Oak.
Native to Pennsylvania, Missouri, Kentucky, Ohio and Virginia
 - EUROPEAN**
Selection of Hungarian and Romanian forests.

HYBRID
Blend of French, American and European oak.

- **BARREL SIZES:**
225L • 228L • 265L • 300L • 500L

- **TOASTING AVAILABLE:**
 - TRADITION MISTRAL
 - CONVECTION ODYSSEY
 - CONVECTION LONG AMBROSIA





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• FINESSE

Our Finesse barrel is an exceptional aging barrel. The best out of our carefully selected, certified French oak staves of fine grain, it is dried for over 36 months. —

- **EXTRA FINE GRAIN (EFG)**
- **DRYING:** outdoors, for a period of 36 months or more.

- **TYPE OF OAK:** **FRENCH**
100% French Oak, certified under PEFC.
Native to Allier, Neves, Vosges and Centre.

- **BARREL SIZES:**
225L • 228L • 265L • 300L

• **TOASTING AVAILABLE:**

TRADITION MISTRAL | CONVECTION ODYSSE | CONVECTION^{LONG} AMBROSIA



• FERMENTATION BARRELS

Developed specially to ferment the best wines. At TN Coopers, convinced that every wine deserves a tailor-made solution, we offer the possibility of assembling the barrel following the demands of any winemaker, providing a choice of accessories, oak and toasting. —

- **FINE GRAIN (FG)**
- **DRYING:** outdoors, for a period of 24 to 36 months.

- **TYPES OF OAK:**
 - FRENCH**
100% French Oak, certified under PEFC.
Native to Allier, Neves, Vosges and Centre.
 - AMERICAN**
100% selected American Oak.
Native to Pennsylvania, Missouri, Kentucky, Ohio and Virginia
 - EUROPEAN**
Selection of Hungarian and Romanian forests.

- **BARREL SIZES:**
225L • 228L • 265L • 300L • 500L

ACCESSORIES

- Full Stainless Steel 316 Lid
- Small Stainless Steel 316 Lid
- Stainless Steel Filter
- Wheels for Barrel Rotation
- Food-Grade Silicon Bung for Fermentation

• **TOASTING AVAILABLE:**

TRADITION MISTRAL | CONVECTION ODYSSE | CONVECTION^{LONG} AMBROSIA





• SPECIAL WOODS

In our constant search for new products, our Special Woods line provides barrels manufactured with different tree varieties, depending on the desired style. —

• **TYPE:** **ACACIA**

We have selected this species, the *Robinia pseudoacacia*, from the forests of Romania. Out of all exotic woods, this one provides the least oxidative environment for wine. In addition, it is characterized by having a low “extractable tannin” content, making it ideal for long-term aging. This tree, among its main characteristics, presents a high aromatic aldehyde content, particularly vanilla and syringaldehyde, accompanied by a gradual increase of spices over time.

CHERRY

This species, known in the botanical world as *Prunus avium*, is characterized by its high concentration of flavonoids and low content of hydrolysable tannins. Therefore, drying times are shorter. This Romanian wood has a low antioxidant potential and a high concentration of condensed tannins, which combined with light toasting, is ideal for short-term aging. Its aromatic compounds provide spicier and fresher notes.

• **BARREL SIZES:**

225L • 300L

• **TOASTING AVAILABLE:**

TRADITION MISTRAL | CONVECTION ODYSSEY | CONVECTION LONG AMBROSIA



• SPECIAL TOASTS

Toasts created to obtain different tastes and sensorial attributes from our woods, together with the specific contribution of oak compounds which provide unique conditions for wine. In addition, it allows barrels to develop their flavors quickly, unveiling specific aromas depending on the recipes. —

• **TYPE:** **SWEET SOUL**

This toast is characterized by improving and extending the wine's tannic structure, while being respectful of the fruit. This thanks to the good integration obtained in mid and long-term interaction between the wood/toast and the wine itself. Ideal for red varieties with soft tannins, like Carménère and Malbec.

FRESH SOUL

Out of all our toasts, this one highlights the fruit the most. It has the least toasted traits and one of the lowest astringencies. It improves structure, mouth sensation and strengthens the freshness. This toast is the perfect candidate for aging white wines. Ideal for delicate varieties like Pinot Noir and Chardonnay, and other varieties where a low contribution of toasted wood is desired.

• **BARREL SIZES:**

225L • 300L



ORIGIN

By *tn*

Science, technology and an unparalleled selection of raw materials, provide a high-end oenological solution for the interaction of wood and wine.

Our alternatives are available in:

A M E R I C A N O A K

F R E N C H O A K

A C A C I A

C H E R R Y

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TN Coopers acknowledges the importance of alternative products, as they represent an oenologically balanced tool of 100% selected, convection toasted wood, which guarantees strict quality standards. —

POWDER

•ORIGIN•

Its small particle size allows an easy addition on the crush pad and in tank. Its use during fermentation reduces defects such as low phenolic maturity of the grape, helping obtain complex, rounded, and balanced wines. Yields a quick result, and minimizes the vegetal character.

RICE

•ORIGIN•

Due to the size of its particles (between 0.08 and 0.3 inches), it quickly provides an easy way to mitigate herbaceous flavors and provides good structure to wine. Because of this, it achieves the best results in short-term aging, depending on the dosage, temperature and amount of movement of the wine in contact with the rice. Perfect for fermentation.

CHIPS

•ORIGIN•

Chips sized between 0.6 and 0.8 inches. These can be used in any stage of the winemaking process; most usually at intermediate stages, when more time is available for a gradual and regulated contribution of its components. It uses a food-grade infusion mesh with hooks that allow for easy tying and attaching inside the tank. Provides aromatic complexity, volume and structure to the wine.

VINTAGE BLEND

•ORIGIN•

Its composition involves a mix of 60% MT++ toast and 40% untoasted. Unique recipe. The expected result will depend on the format chosen (dust, rice or chip).

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VINIBLOCK

• ORIGIN •

Unique combination of small 100% selected oak cubes, with the chosen toast recipe. These can be introduced into any type of container, favoring a quick integration of the wood.

During fermentation, Viniblock contributes to the tannic setup for a considerable improvement in structure and complexity. At the aging stage, besides the gains in structure and elegance, it contributes to the preservation of color, while also providing aromas and flavors associated to the type of wood and the toasting level chosen.

It uses a food-grade infusion mesh with hooks that allow easily tying and attaching it inside the tank.



BARREL RESTORERS

ZIG ZAG

• ORIGIN •

This method reinforces the contribution of oak in used barrels, intensifying their organoleptic profile. Easy to use, this product is introduced through the barrel's bung hole.

20 pairs of staves in a polyethylene mesh sock allow for an easy insertion into the barrel.

- Size: 9.8" x 1.2" x 0.43" in



BARREL STAVES

• ORIGIN •

Insertion system designed to improve the oenological qualities in used barrels. It consists of 2 packs of staves, easily adapted according to the barrel's size and desired contact surface. The system is introduced through the head of the barrel and is mounted vertically. This easy setup allows for easy washing, filling and emptying processes. Also, it does not interfere with the "bâtonnage".



Complete flexibility. Staves allow the mixing of different woods, toasting levels and customization of the wine/wood contact surface. Quick and easy to install and dismantle.

SHORTSTAVE FAN STAVES

• ORIGIN •

Designed for adaptability, it allows the mixing of different woods and combining them with different levels of toasting. Great flexibility in the wine/wood contact surface ratio.

Available in two sizes:

SHORTSTAVE SYSTEM

- Stave size: 39.4" x 5.5" x 1/2" or 3.33 sqft/stave; 10 staves per system.

MINISTAVE SYSTEM

- Stave size: 37" x 2" x 1/4" or 1.18 sqft/stave; 10 staves per system.

This system has an adaptable stainless steel self-supporting structure, made to install in any type of container regardless of its capacity. The vertical position of the staves enables the must and skin to move freely when used during the fermentation of red wines. This system, which allows fermentation and aging of the wine, delivers a better integration of wood and wine.

- Available in 51" to 118" long staves



TOASTS

- Depending on the winemaker's preference, we have the following toasts available for our Origin line:

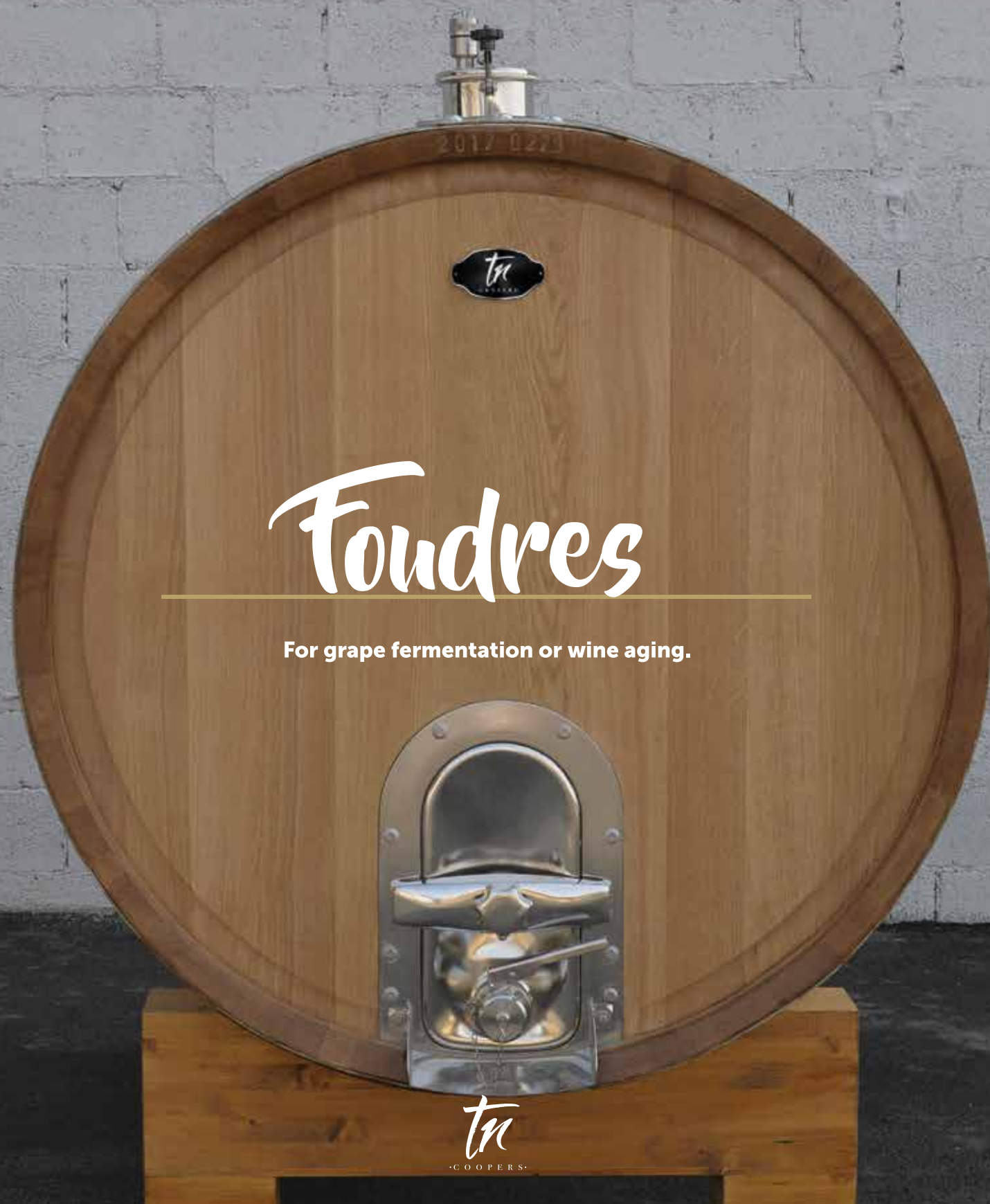
CONVECTION LONG CONVECTION

FRESH PLUS

The most "fruity" of our toasts. It has the least toasted traits and one of the lowest astringencies, enhancing fruit notes. It improves structure, mouth sensation and also strengthens the freshness. This toasting is a perfect candidate for white wines, and delicate varieties like Pinot Noir and Chardonnay.

SWEET PLUS

Quick and intense contribution of coconut and sweet aromas like vanilla in short-term aging. Structures the wines very well. Ideal for wines needing structure and finish in a short time.



Foudres

For grape fermentation or wine aging.



• FOUDRES

In 2016, TN Coopers embarked on a joint venture with the Austrian company Pauscha, renowned foudre manufacturer since 1875. Our line of foudres and oak vats produced in Austria seeks to provide subtle aromatic contribution and a special microoxygenation, adapted for the aging and fermentation of wine. Toastings by request. _____

• **FINE GRAIN (FG)**

• **DRYING:** outdoors, for up to 10 months per centimeter of thickness.

• **TYPE OF OAK:**

- SLAVONIAN OAK**
Certified 100% native.
- AUSTRIAN OAK**
Certified 100% native.
- GERMAN OAK**
Certified 100% native.
- FRENCH OAK**
Certified 100% native.

• **FORMATS:**

- OVAL**
- ROUNDED**
- TANK**

• **BARREL SIZE:**

1,000L and up.

• **TOASTING AVAILABLE**

NO TOAST	LIGHT	MEDIUM
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Tannins

Wines marked by the heart of the oak

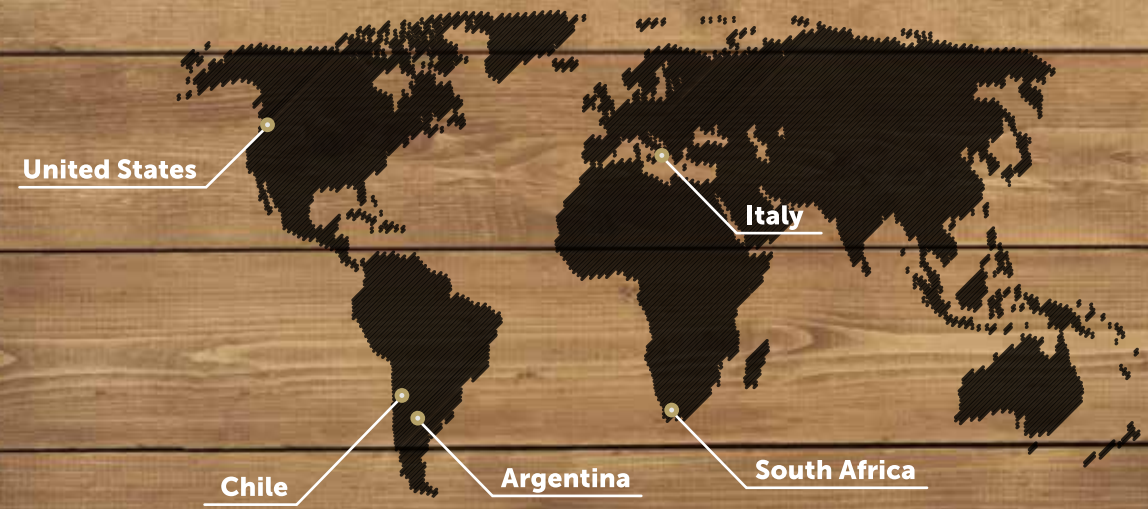


• PURE OAK

Pureoak, taken from the heart of the oak itself, has been developed from a fine selection of staves treated under our sophisticated convection toasting system, and subjected to an exclusive and innovative extraction process with water as the only solvent. The result is an instant dissolving product, with maximum quality and purity, which gives a high aromatic intensity, strengthening mouth structure and protecting the wine from oxidation. —

- **APPLICATION:** In wines during the aging, refining or pre-bottling processes.
- **METHOD OF USE:** Apply and dissolve directly in final volume being treated, ensuring a complete dissolution of the product.
- **WEIGHT:** 500g
- **CONSERVATION:** Keep in its original container, in a dry, fresh place.

** Pure Oak must be used in accordance to local legislation.*



INTERNATIONAL PRESENCE

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