



TECHNICAL GUIDE

Tonnellerie de Mercurey

Because our expertise starts in the forest



From forest to the glass, the Tonnellerie de Mercurey is the culmination of a long family tradition; and the personal passion of its owners, Carole and Nicolas TARTERET.

A complete range of casks and barrels reflecting our unique concept of blending forest and specific toasting to enhance our oak



Our selection criteria

The Tonnellerie de Mercurey is renowned for its precision in blending oak, using wood from three different forests in every barrel.

Our oak blending philosophy enables us to deliver barrels of the consistency and homogeneity our customers seek, year in year out.

The key to this consistency is our integrated stave-mill, NT Bois, which supplies all of our wood. From this relationship, we gain the unparalleled access, experience and knowledge of Nicolas Tarteret and his team of specialists.

— BLENDING, the guarantee of our consistency

Influenced by terroir, climate, exposure and adjacent trees, every tree is unique.

To compose homogenous blends that remain consistent over time, we use three criteria to objectively evaluate the quality of each stave - grain size, forest management and terroir.

— THE “TERROIR”

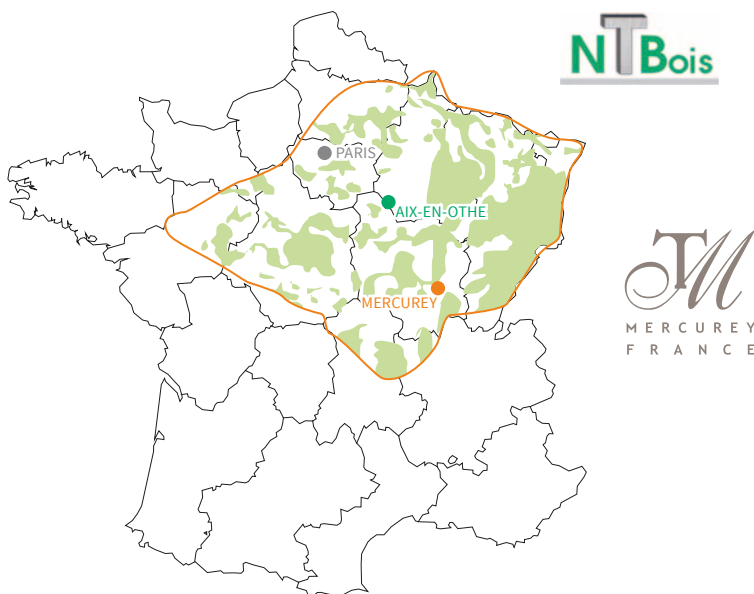
In the same way that the grape reflects the terroir in which it is grown, oak trees are influenced by their exact growing place.

Over a growing period of 150 to 200 years, the soil's physical characteristics, minerals and water content shape the wood's quality and chemical composition. The terroir also affects oak colour and aroma.

We have singled out 3 specific “terroirs” in our region:

- SABLE: Sandy soil, The state forests of Fontainebleau, Russy and Retz
- CRAIE: Chalky soil, the forests of Othe and Champagne
- PIERRE : Stony ground, the forests of Chatillon and Northern Burgundy

Very precise blends of these different woods are found in our Evolution range.



TM Oak

Our selection criteria

GRAIN SIZE

The grain represents the growth of the oak tree over a year.

The speed of growth may vary, depending on factors such as rainfall, soil richness and competition from adjacent trees. Differing rates of growth result in variations in the structural tissue of the wood, and hence its chemical composition.

The variations produce grains of different sizes (from under 1mm to over 5mm).

In the initial stages at the stave-mill, the wood is separated into two categories, based mainly on grain size:

- Large grain (over 4 mm), which are dedicated to spirits (Cognac, Armagnac, etc.)
- Fine grain (under 4 mm), together with specific colours of wood, which are suitable for aging wines.

After seasoning, the staves are made. The staves are again sorted and separated into four groups:

- Medium Grain (3-4 mm)
- Fine grain (3 to 2 mm)
- Very fine grain (2 to 1.5 mm)
- Extra fine grain (< 1.5mm)

To ensure total traceability, records are kept throughout the sorting and drying process.

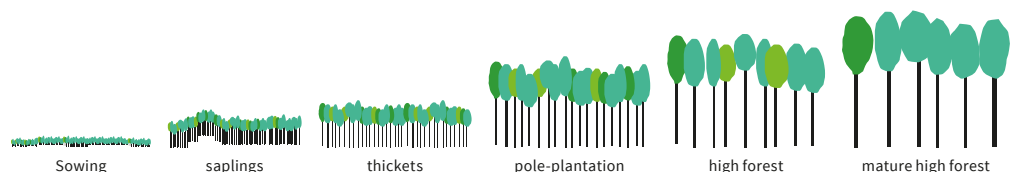
FORESTRY MANAGEMENT

FUTAIE

The Futaie forests were first planted in the 17th century as a source of high quality wood for ship building. As the world began to industrialise, the subsequent reduced demand for wood enabled coopers to begin using these remarkable oak trees.

The trees are very densely planted, with up to 100,000 trees per hectare. They are progressively thinned out every twenty-five years, until - two centuries later - 150 top-quality mature trees remain.

In these forests the competition between the trees pushes them to grow in height as they seek light. Wood sourced from Futaie forests generally presents a homogeneous tight grain.



In several areas, a special forest management system has been introduced to produce even higher quality oak. By prolonging the time between harvesting, the level of competition between the trees is increased. This means that growth is transferred from width to height, making the grain even tighter. Due to the height of the trees, this system is called “**Haute Futaie**” management.

TALLIS SUR FUTAIE (TSF)

Approximately 70% of French forests are TSF, or coppiced, woodland.

Unlike Futaie forests they are renewed naturally and present a wilder appearance.

Approximately every 25 years, the mature trees are harvested, while small unpromising trees are used as firewood.

Wood sourced from TSF forests can present mixed grain sizes : therefore only a smaller percentage of the wood harvested is suitable for cooperage.

In recent years, forestry methods have evolved and the majority of the TSF forests are slowly being transformed into Futaie by the National Forestry Bureau and owners concerned about wood quality. This type of forest is called Taillis sur Futaie en Conversion.



Our historic range; a selection of different colours and grain sizes, sourced from at least three different forests

— **FINE GRAIN SELECTION 2-YEAR - 27 mm**

After 24 months of open air drying in the high rainfall area of the Côte de Bar, Southern Champagne, where our stave mill is situated, we select wood from a minimum of three different forests.

This blend consists mainly of fine grain sizes sourced from TSF, with additional very fine grain sizes sourced from TSF en Conversion and a few staves with grain sizes over 3mm:

>3 mm: 4 staves // Fine grain: 18 to 20 staves // Very fine grain: 8 to 10 staves

— **VERY FINE GRAIN ASSEMBLAGE 3-YEAR - 27 mm**

After 36 months of open air drying in the high rainfall area of the Côte de Bar, Southern Champagne, where our stave mill is situated, we select wood from a minimum of three different forests.

The blend consists mainly of very fine grain sizes sourced from Futaie, with additional fine grain sizes sourced from TSF en Conversion and a single stave with a grain size over 3 mm:

>3 mm: 1 stave at the most // Fine grain: 10 staves // Very fine grain: 20 staves

The concept is identical to the 2-Year Fine Grain Selection but with higher criteria in terms of grain and colour.

— **NICOLAS SELECTION**

After 30 months of open air drying in the high rainfall area of the Côte de Bar, Southern Champagne, where our stave mill is situated, we select wood from a minimum of three different forests.

This blend consists mainly of very fine grain sourced from Futaie, completed with fine grain sizes sourced from TSF en Conversion and a single stave with a grain size over 3 mm:

>3 mm: 1 stave at the most // Fine grain: 10 staves // Very fine grain: 20 staves

This blend follows the same rules as the 3-Year Very Fine Grain Selection in terms of grain size. However the specific location of the forests and the quality of the soils chosen for the Nicolas Selection present lighter, pinker colours to perfectly match our CLL toast.

— **HAUTE FUTAIE**

Haute Futaie is a selection of wood that comes solely from forests managed using this special technique. The trees are planted very densely (100,000 per ha) and are progressively thinned out during growth until, almost two centuries later, only 150 trees per hectare remain.

In these forests, the high level of competition pushes the trees upwards as they search for light. This produces extra-fine grain sizes with a special aromatic profile.

The wood is air-dried for 30 months in the high rainfall area of the Côte de Bar, Southern Champagne, where our stave mill is situated.





TM Evolution

Our selection of “terroirs” or soils

— “CRAIE” OR “CHALKY” SELECTION

When fresh oak enters the stave mill we set aside wood grown under TSF forestry management on the chalky soils of Champagne and north Chablis.

After 30 months of open air drying in the high rainfall area of the Côte de Bar, Southern Champagne, where our stave mill is situated, we select the lightest coloured woods from that stock.

This wood is sourced from a minimum of three different forests with the same type of “terroir”. Grain sizes from the Craie selection are identical to the 2-Year Fine Grain Selection.

— PIERRE SELECTION

“Pierre” wood comes exclusively from TSF forest on the top of several hills in the north of Burgundy, where there are dry rocky soils. This results in lower and larger trees, with more chaotic growth.

Thus, Pierre wood possesses an intrinsic heterogeneity that naturally corresponds to our blending philosophy. A single stave of this wood possesses different aspects of grain and colour.

Pierre woods are air-dried for 30 months in the high rainfall area of the Côte de Bar, Southern Champagne, where our stave mill is situated.

— PRESTIGE

This specific blend comprises exclusively extra fine grain woods, from a selection of our best Haute Futaie oak grown solely on sandy / clay soil. This is a unique and exclusive selection, presenting a clear pink colour and mineral cedar-like smell.

The pink colour comes from the combination of the Haute Futaie forestry management and the specific sandy and clay terroir.

This wood is air-dried for 30 months in the high rainfall area of the Côte de Bar, Southern Champagne, where our stave mill is situated.

We find this quality of wood in certain small state-owned forests, such as Fontainebleau, Senonches, Reno-Valdieu, Belleme, Russy, Boulogne, Beaulieu, La Haie Renaut, Tronçais, Berce and Retz, where sand is the dominant element in the soil’s composition.



Specific Bordeaux and cabernet barrels with 22 mm thick staves for better oxygen exchange, as needed by the cabernet family. 225L capacity Bordeaux shape only.

— **FINE GRAIN SELECTION - 22 mm**

After 24 months of open air drying in the high rainfall area of the Côte de Bar, Southern Champagne, where our stave mill is situated, we select wood sourced from a minimum of three different forests.

This blend consists mainly of fine grain sourced from Futaie combined with very fine grain sourced from “TSF en Conversion”, and a few staves with grain sizes over 3 mm.

— **NICOLAS SELECTION - CLL 22 mm**

After 24 months of open air drying in the high rainfall area of the Côte de Bar, Southern Champagne, where our stave mill is situated, we select wood sourced from a minimum of three different forests.

This blend consists mainly of very fine grain sizes sourced from Futaie, completed with fine grain sourced from TSF en Conversion and a single stave with a grain size over 3 mm.

The specific location of the forests and the quality of the soils chosen for the Nicolas Selection, present lighter, pinker colours that perfectly match our CLL toast. (See toasting specifications).

— **HAUTE FUTAIE - 22 mm**

Haute Futaie is a selection of wood that comes solely from forests managed using this special technique. The trees are planted very densely (100,000 per ha) and are progressively thinned out during growth until, almost two centuries later, only 150 trees per hectare remain.

In these forests, the high level of competition pushes the trees upwards as they search for light. This produces extra-fine grain sizes with a special aromatic profile.

The wood is air-dried for 24 months in the high rainfall area of the Côte de Bar, Southern Champagne, where our stave mill is situated.

— **PRESTIGE - 22 mm**

This specific blend is composed only of very fine and extra fine grain sizes, from a selection of the best Haute Futaie oak, grown exclusively on sandy and clay soil. This is a unique and exclusive selection, presenting a clear pink colour and mineral cedar-like smell.

The clear pink colour comes from the combination of the Haute Futaie forestry management and a specific sandy and clay terroir.

This wood is air-dried for 24 months in the high rainfall area of the Côte de Bar, Southern Champagne, where our stave mill is situated.

We find this quality of wood in certain small state-owned forests such as Fontainebleau, Senonches, Reno-Valdieu, Belleme, Russy, Boulogne, Beaulieu, La Haie Renault, Tronçais, Berce and Retz, where sand is the dominant element in the soil’s composition.





TM Our toasts

— M: MAISON

Our house toast. A medium flame and light water treatment gives a toast penetration of 3-5 mm and a toasted bread colour to the wood. This helps to produce wines of character, body and a supple round, fleshy mouth feel. Aromas of chocolate, coffee and vanilla are common. (Also available in M- and M+, with the difference being time on the flame).

- *Château le Sartre - Pessac-Léognan*
- *Château Ollieux-Romanis - Corbières*
- *Domaine des Perdrix - Nuits St Georges*
- *Jacques Carillon - Puligny-Montrachet*

— ST: SPECIAL TOAST

Frequent water treatment combined with a medium flame ensures a tan coloured toasting that penetrates 6-7 mm into the wood. This long toast reflects the aromatic and structural profile of the barrel adding elegance, length and minerality to the wine. Floral and fruit aromatics are accentuated and framed without wood dominance.

- *Château la Rivière - Fronsac*
- *Domaine Dauvissat - Chablis*
- *Vouette et Sorbée - Champagne*

— GC: GRAND CRU

Regular water treatment combined with an extended firing at higher temperatures creates our deepest, most impactful toast (7-8 mm). This coffee coloured toast adds richness and structure to a wine. The barrel supports the wine, building body and length. The Grand Cru is our 'umami toast', and needs rich ripe fruit or risks being overpowering.

- *Domaine Ramonet - Chassagne-Montrachet*
- *Domaine G.Y. Dufouleur - Nuits-Saint-Georges*
- *Château Corton André - Alox-Corton*

— LF: LIGHT AND FRUIT

A lighter toast designed to retain the wine's fruitiness. Craie wood, grown in the chalky, less fertile soils, is generally lighter in terms of tannins and aromatic precursors. We use water and steam in this medium-light toast to respect the wood's delicate structure and to prevent the development of strong toast aromas.

This technique also allows a deep penetration of the heat, avoiding any sappy aspects to the barrel. Recommended for short oak maceration between 6 and 10 months.

- *Domaine Jacquesson - Rully*
- *Chateau de Chamirey - Mercurey*
- *Domaine Pichon - Côte Rôtie*



Our toasts

— CLL: CHAUFFE LIGHT & LONG

At the opposite end of the spectrum to the GC, the CLL is delicately toasted over oak embers. The low temperature of the firing is offset by the length of toasting, which gives a honey coloured profile with a depth of 3-5 mm. This very light toast has minimal aromatic impact on the wine but adds a freshness and suppleness, which imparts to the wine brilliance and luminosity. Our experience is that this toast needs at least 12 months to fully integrate into the wine.

- *Château Haut Bailly, Grand Cru Classé - Pessac-Léognan*
- *Maison Chapoutier - Vallée du Rhône*
- *Domaine Guillot-Broux - Macon*
- *Domaine des Perdrix - Nuits-Saint-Georges*

— CL: CHAUFFE LIGHT

This toast was born from an experiment with Domaine Dujac pushing the CLL boundaries. The toasting process is identical to the CLL, but around half the time. This keeps the oak very fresh. This toasting must be used only for very high quality grapes and is suitable for long aging processes.

- *Thibaut Liger-Belair - Nuits-Saint-Georges*
- *Jacques Prieur - Meursault*
- *Taupenot-Merme - Morey-Saint-Denis*

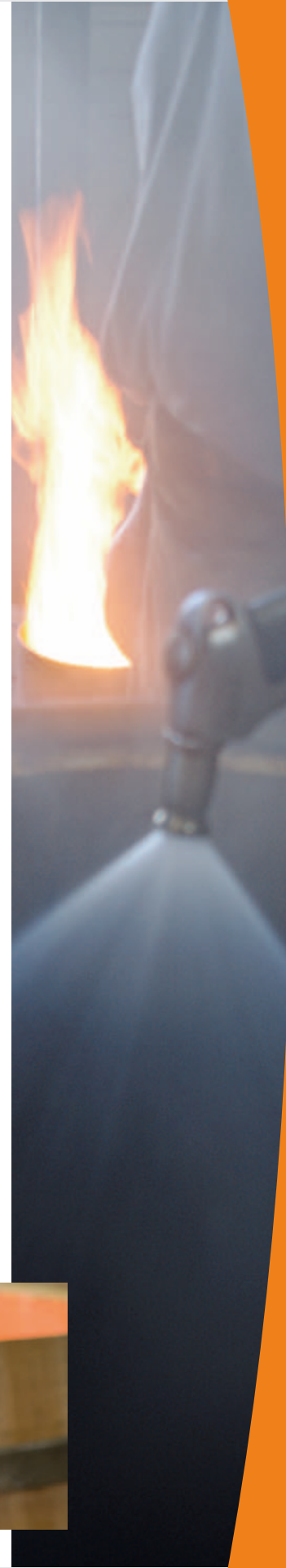
— CLL +: CHAUFFE LIGHT LONG PLUS

A light and long toast derived from our classic CLL toast; developed to get the very best out of the “Pierre” wood. In the CLL+ toast, we replace the last few minutes of low-temperature toasting with a rapid “coup de flamme”. This allows us to take advantage of the natural richness of the Pierre wood, while preserving its structure.

- *Clos de Tart - Morey-Saint-Denis*
- *Château du Tertre, Grand Cru Classé - Margaux*
- *Jean Pillot - Chassagne Montrachet*

	TOASTING with WATER			DRY TOASTING				
	LF	ST	GC	CL	CLL	CLL+	M	M+
Temperature	X	XX	XXX	X	X	X	XXX	XXX
Flame	X	XX	XXX	X	X	X _x	XXX	XXX
Water	XX	XX	XXX	X	X	X _x	X	X
Length	XXX	XXX	XXXX	X	XXX	XX	XX	XXX

Note: in wet toasts more time is required for the same penetration.



TM Our Quality & Traceability Control

By inaugurating its new building in July 2009, the Tonnellerie de Mercurey invested significantly in a production unit at the cutting edge of technology. The Tonnellerie's aim is to supply you with top-quality barrels, made on an environment-friendly site that is the reflection of our main convictions: "A blend of respect and traditions of our cooperage to serve your wines".



Our state-of-the-art production facility, built to the specifications of winemaking premises, was completed in 2009. Since that time we have continued to invest in technology and product stewardship to ensure our customers receive barrels of the finest quality.

Working with respected industry laboratories, we regularly test our wood, and air and water supplies, to avoid any possible chemical contamination.

Tonnellerie de Mercurey's integrated NT Bois stave mill means that we can guarantee:

- PEFC certified wood of French origin
- Total traceability "from forest to barrel"

ISO 9001 and ISO 22000 certifications guarantee the control, homogeneity, traceability and reproducibility of our manufacturing process and our quality of service.





A family-sized company, with a range of specialist skills and decades of knowledge and expertise.

This combination of skills and experience has allowed the Tonnellerie de Mercurey to become a highly regarded name in the oak barrel market, both in France and worldwide.

The difference is our uncompromising attitude

From forest to wine, our teams of forestry experts, stave-millers, artisan coopers and experienced oenologists offer you a rich blend of talents.

The professionalism of our experts during every stage of the barrel-making process is our guarantee of a superior, individual solution to all your needs.





Tonnellerie de Mercurey

Rue de Rolline - 71640 MERCUREY - Burgundy - France
Phone: 00.33/(0)3.85.98.11.70 - Fax: 00.33/(0)3.85.98.11.71

E-mail : commercial@tonnellerie-de-mercurey.com



www.tonnellerie-de-mercurey.com