

• COOPERS •

• AMERICAN OAK •

Quercus Alba

Open air drying up to 36 months



Fine Grain



Logging of mature trees (90 years or older)

FOREST SELECTION

Pennsylvania

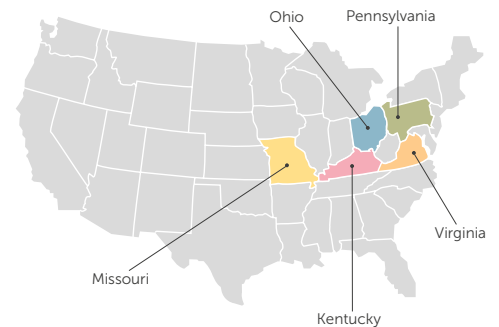
Considered one of the finest to be used for wine production because of its soft tannins and rich, full flavors. A tight grain structure is a key component to making Pennsylvanian oak a good source of quality oak, which is directly related to the short growing season because of their cold winters and mild, short summers. The tight grain structure helps to soften the influence of tannins in both American and French oak. The seasoning process makes the oak even more elegant for wines by leaching out the harsh tannins. Rich mocha, chocolate, and ripe dark fruits such as blackberry, dark cherry, and cassis can be found in wine aged in Pennsylvanian oak. Tobacco and slight smoky characteristics can sometimes be found as well.

Kentucky, Ohio and Missouri

All three states have a wealth of American oak because of the fertile soil and long growing season which results in oak with a wide grain structure and robust tannins, favoring a greater oxygen exchange. The average growth in these forests is significantly greater than what is found in Pennsylvania and other northern states with shorter growing seasons. The taste profiles of American oak from this region offer a wide range of characteristics from sawdust and fresh oak, to smoky flavors and bacon, to ripe fruits such as plum and raspberry.

Virginia

Vary greatly in the tightness of grain due to the varying climate within the state. The tight grained oak from this region will have softer, elegant attributes similar to the oak found in Pennsylvania, and the oak with a wider grain will be more similar to the oak from the forests of the midwest. Flavors such as chocolate and berries are found in oak from this region and soft or robust tannins based on the type of grain.



DIMENSIONS

	160 L	225 L	228 L	265 L	300 L	500 L
Height (mm)	945 ± 5	945 ± 5	875 ± 5	930 ± 5	950 ± 5	1,065 ± 5
Head Ø (mm)	440 ± 5	530 ± 5	555 ± 5	560 ± 5	595 ± 5	720 ± 5
Bilge Ø (mm)	595 ± 5	685 ± 5	720 ± 5	735 ± 5	785 ± 5	935 ± 5
Thickness of Staves (mm)	27 ± 2	27 ± 2	27 ± 2	27 ± 2	27 ± 2	27 ± 2
Thickness of Head (mm)	27 ± 2	27 ± 2	27 ± 2	27 ± 2	27 ± 2	27 ± 2
Bung Hole Ø (mm)	50	50	50	50	50	50
Number of Staves	26 ± 2	30 ± 2	30 ± 2	32 ± 2	34 ± 2	40 ± 2
Number of Hoops	6	6	6	6	8	8
Weight (kg)	41 ± 1	49 ± 1	50 ± 1	52 ± 1	62 ± 1	84 ± 1
Contact surface	1.65/1.70 m ²	2.05/2.10 m ²	2.09/2.15 m ²	2.35/2.40 m ²	2.44/2.50 m ²	3.45/3.50 m ²

Reference values for informational purposes. Handmade product, measurements may vary.

* All our barrels include a silicone bung.

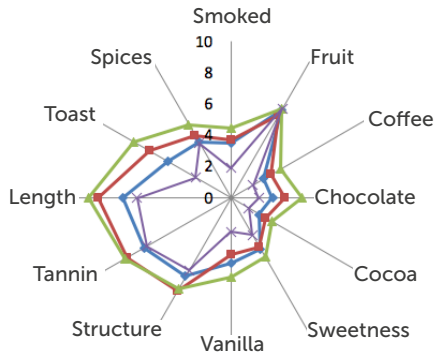
* Available upon request: Kosher and gluten-free barrels.

* Please contact us for information on other formats.

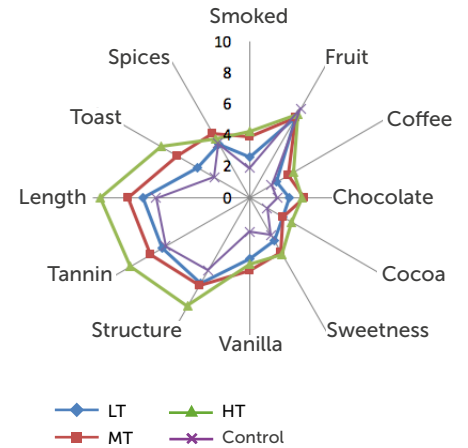
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SENSORY PROFILES

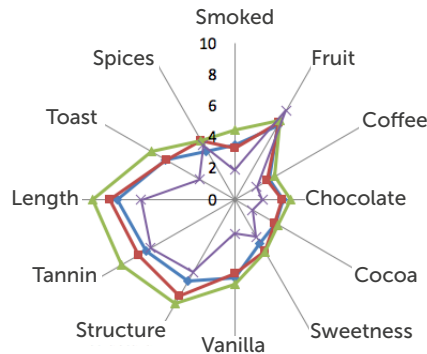
CONVECTION



TRADITION



LONG CONVECTION



*Control: Cabernet Sauvignon

TOASTING LINES

CONVECTION TOASTING SYSTEM

Exclusive software developed and patented by TN Coopers.

By means of thermodynamic principles, instead of using temperature and time variables alone, this system works around the concept of thermal energy supply in an oven that allows the flow of hot air, controlling the temperatures through the inside of the barrels. This process achieves a slow, soft, homogeneous toast with a deeper penetration of the wood's surface. With this unique style of toasting and technical approach, our software allows us the ability to offer personalized toasting recipes based on the needs of the winemaker.

TN Coopers' exclusive software considers thermodynamic principles with variables of time, temperature, humidity and controlled air flow, allowing the creation of unique recipes.

CONVECTION



Toasts: LT/MT/MT+/HT

This yields a higher proportion of certain phenolic compounds which contributes to a deeper sensation of structure in red wines, as well as providing the ability to achieve color stabilization. Both the time and temperature designed for this line contribute to a higher availability of polysaccharides from the wood that are transferred to the wine. This translates to a higher sensation of volume in the mouth.

LONG CONVECTION



Toasts: LT/MT/MT+

Prolonged toasts that can go from 3 to 6 hours depending on the recipe. The gradual and balanced contribution of phenolic compounds and aromas to wines allows us to recommend this line for longer aging (more than 12 months). The strong sensation of a powerful bouquet of concentrated flavors, length in the finish, and aromatic potency represent iconic attributes to this line of toast.

TOASTED BY FIRE

TRADITION



Toasts: LT/MT/MT+/HT

This barrel owes its unique properties to an ancient French toasting process, named *Chauffe à Coeur*, or "heart toasted." In addition to this method, we bring some moisture to the rosette with purified hot water, warming it in a steam chamber to open its pores, and finally applying a careful refining toast. Our water-steam process facilitates bending and eliminates any resin residue. It brings complexity, tannin softness, while maintaining the fruit and sweet notes ... especially for high-end wines with a harmonic evolution.