



OakScan[®], the first scientific innovation applied to the selection of wood.

At the end of the 1990s, Radoux introduced new criteria into its process with regard to selecting wood: selection by grain. This, together with the research carried out on the control of raw material, led to the perfecting of the Oakscan[®] process.

Instantaneous measurement of tannins in wood

Tannins have a major impact on the organoleptic properties of the wines or spirits they enrich. They change the sensory profile, the tannic structure, the colour, and have a protective role with regard to oxidative breakdown.

Until now, only chemical measurements carried out in a laboratory enabled us to measure ellagitannins. These measurements could only be made by taking random samples from batches of rough staves and took a long time to obtain.

In 2008, after several years of research, Radoux's R&D department launched the world's first process to instantly measure the quantity of polyphenols contained in staves: **OakScan[®]**.

The process

OakScan® is a system of rapid analysis, stave by stave, based on Near Infrared Spectrometry. Each stave entering into production is scanned and marked with a letter (« F » on the particular batch in the photo to the right).

This letter indicates which category of tannic potential it belongs to.

It helps the coopers sort the staves more easily and make barrels with specific polyphenolic indexes (PI).

This index estimates that the polyphenolic content of the wood is between 0 and 100.



After ten years of using the system and over **10 million analyses**, Radoux now has the largest database in the world on the chemical composition of French oak.

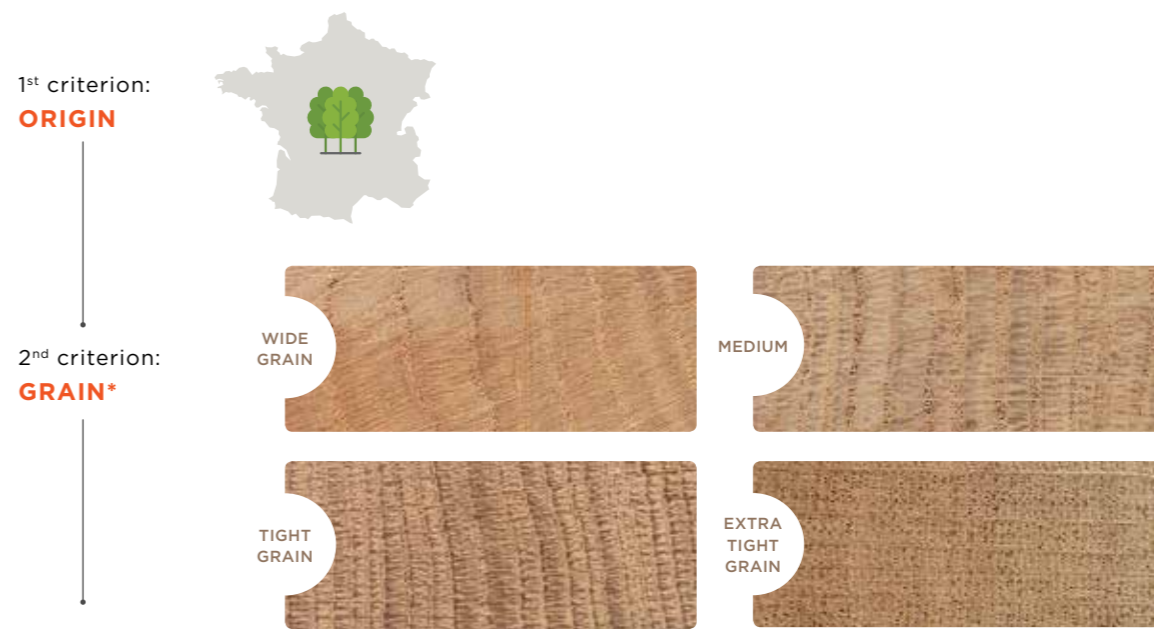
A unique database on the chemical composition of wood.

Radoux's R&D team regularly carry out trials to highlight the impact of **OakScan® selections on the organoleptic properties of wine.**

These tests are executed on a large scale in cooperation with many oenological institutes, including the ISVV of Bordeaux, on wines coming from the finest wine regions in the world.

Over three hundred trials of **OakScan®** selections have been performed since 2008. Each time, the trials have proved their value in the world's finest vineyards (France, USA, Spain, Italy, Chile, Australia, China...) and on different grape varieties (Chardonnay, Sauvignon Blanc, Merlot, Tempranillo, Syrah, Cabernet Sauvignon, Pinot Noir...).

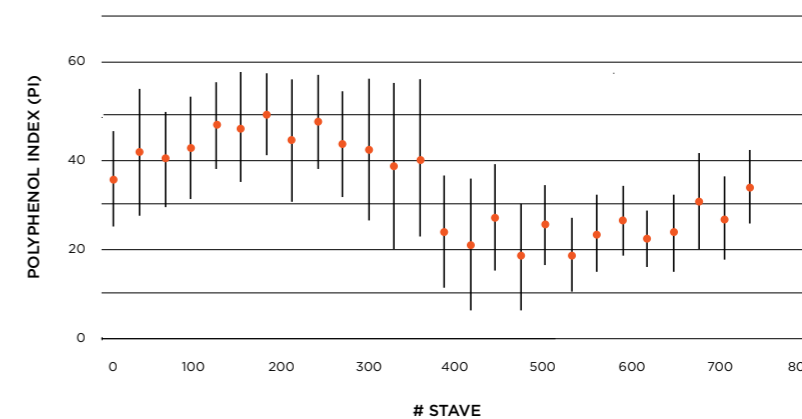
The three pillars of oak selection



3rd criterion: OAKSCAN®

Example of the natural distribution of tannins in two batches of wood

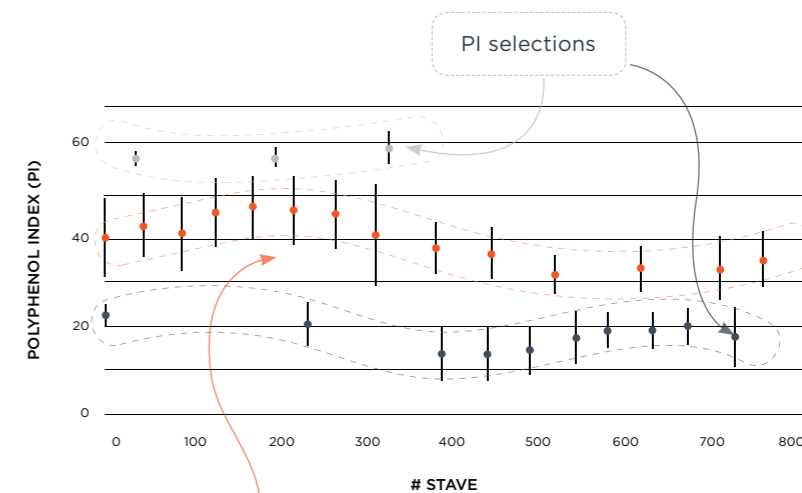
Each dot represents a barrel made of approximately thirty staves which have not been sorted.



Example of a selection made from these two same batches

Each dot represents a barrel made from a batch of approximately thirty staves sorted with the help of **OakScan®**.

- Oakscan 60
- Oakscan 40
- Oakscan 20



A homogeneous heart of the range

* non-contractual photos

OakScan® : a tool in the service of precision oenology

Every stave used in our French and European oak barrels is analysed by OakScan®. Therefore these barrels have a homogenous tannin content.

In addition to traditional selections, Radoux OakScan® helps improve the homogeneity and reproducibility of the results obtained after aging, thus achieving more precise vinification.

- Radoux OakScan® completes the traditional methods of wood selection (origin, grain).
- Radoux OakScan® helps ensure with precision that the barrels made have a homogeneous polyphenol content.
- Radoux OakScan® optimises the suitability of the wood in relation to the type of wine you are seeking to achieve.

Distribution of main products of the range according to their polyphenolic index OakScan® (PI)

Specifics RED

		Polyphenolic Index Oakscan®
French oak	225/228L	
	SUPER FINE BLEND EXTRA FINE X-BLEND	35 ^{+/-5}
	OMEGA	30 ^{+/-7}
	TIGHT GRAIN	40 ^{+/-7}
	TIGHT GRAIN OAKSCAN 20	20 ^{+/-4}
	ALLIANCE/MIXED (MEDIUM AND TIGHT GRAIN)	40 ^{+/-10}
	MEDIUM GRAIN	50 ^{+/-10}
	300L	45 ^{+/-10}
400 / 500L	45 ^{+/-10}	
European oak	225/228L	28 ^{+/-7}
	300L	28 ^{+/-7}
	400/500L	28 ^{+/-7}

Specifics WHITE

		Polyphenolic Index Oakscan®
French oak	225/228L	
	SUPER FINE BLEND EXTRA FINE X-BLEND	35 ^{+/-5}
	OMEGA	30 ^{+/-7}
	TIGHT GRAIN	40 ^{+/-7}
	ALLIANCE/MIXED (MEDIUM AND TIGHT GRAIN) OAKSCAN 30	30 ^{+/-7}
	ALLIANCE/MIXED (MEDIUM AND TIGHT GRAIN) OAKSCAN 50	50 ^{+/-7}
	MEDIUM GRAIN	50 ^{+/-10}
	300L	45 ^{+/-10}
	400L / 500L	45 ^{+/-10}

Specifics SPIRITS

		Polyphenolic Index Oakscan®
French oak	350/400L	
	TIGHT GRAIN	40 ^{+/-10}
	WIDE GRAIN	60 ^{+/-10}

