



## Technical Specifications

### Standard Barrel Sizes

Size	Capacity +/- 2.5L
Barrique	225 litre
Hogshead	300 litre
Puncheon	475 litre

### Dimensions

Size	Head Diameter +/- 5mm	Bilge Diameter +/-10mm	Length +/-5mm
Barrique	560mm (22")	675mm (26 3/8")	965mm (38")
Hogshead	610mm (24")	765mm (30")	1050mm (41 1/2")
Puncheon	750mm (30")	915mm (36")	1115mm (44")

**American Oak:** A maximum 10.5% moisture content is maintained throughout manufacture. With the hot and dry Barossa Valley summers, the moisture content must be held below that used by Northern Hemisphere cooperages. This lower moisture content ensures minimal shrinkage and exceptional sealing properties resulting in negligible barrel leakage.

**French Oak:** as further refinement of our use of French Oak all French Oak arriving at the cooperage prior to manufacture is stored in an open shed to allow air movement through the stave stack and also to prevent our summer sun drying the oak too much. This allows us to retain a stable moisture content with in the raw oak.

All oak inventories are coded and data-based from the mill to the final product with individual data codes maintained through every production process.

**Oak dimensions:** All dimensions are at final size after fabrication.

**American Oak Staves:** 28.5 – 29.5mm thick Headings: 27.5mm thick

**French Oak Staves:** 26.5 – 27.5mm thick Headings: 25.5mm thick



## Toasting

All toasting formulae are proprietary to A.P. John Coopers, having been perfected over 120 years of experience. All toasting times are taken after steaming and bending.

## Barrel Toasting

A.P. John offer the following toast levels or can customise to your exact requirements.

- Medium light
- Medium
- Medium Plus (A.P. John Coopers 'house toast' style)
- Medium heavy
- Heavy

Reserve Select French Oak Barrel toasting: as part of the continuing re-refinement of coopering at A.P. John, we have developed a specific toast method we call "SFT". Together with oak seasoning regimes, this toasting method creates a barrel that displays fresh spice / oak characters on the nose whilst delivering a soft early integrating palate.

Close attention to toasting formulae and stringent quality controls ensure consistent results from barrel to barrel.

All barrel sizes are available with or without head toasting.

225 litre Barriques and 300 litre Hogsheads are available with 'standard bend' (dry fire and steam) or 'immersion bend' (immersed in hot water) manufacture for added flavour complexity.

## Hoops

All barrel sizes are fitted with 6 galvanised hoops.

<b>Size</b>	<b>Chime Hoop</b>	<b>Quarter Hoop</b>	<b>Bilge Hoop</b>
Barrique	60mm	45mm	50mm
Hogshead	60mm	45mm	50mm
Puncheon	70mm	50mm	50mm



## **Bung Hole**

Bunghole Taper cut and cauterised to 53mm outer diameter to finished inside diameter of 48 to 48.5mm dependant on stave thickness.

A full range of [Silicone Bungs](#) and [Shives](#) are available to suit all A.P. John Barrels and a wide range of other coopers barrels.

## **Bending**

### **Fire/ Steam Bent Barrels**

The traditional bending method for an A.P. John barrel is to utilise the natural elements of fire and water. The staves are 'raised' together within a control hoop, the process referred to as "raising the barrel". (The term obliquely comes from the French "mise en rose" which literally means "setting the rose", presumably because the unbent staves looks like an open flower). After the first three raising hoops have been driven, the 'rose' or 'shook' is ready for bending.

The staves are prepared for bending by placing the 'open petals' of the 'rose' or 'shook' facing down. While over the brazier, the barrel is frequently sprinkled with water. The heat from the brazier combined with the water to steam the wood, ensuring the oak is pliable to bend. This traditional method of bending has been employed and refined at A.P. John for over 120 Years.

This bend process coupled with our unique toast formulae ensure a complex array of lifted aromatics.

### **Immersion Bent Barrels**

Apart from the Traditional - fire/steam barrel bending technique, for the past 15 years, A.P. John Coopers have also crafted oak barrels utilising the barrel bending technique that requires the 'Immersion' of the barrel "shook" in a hot tank of water. This type of bending process, commonly known as 'Immersion Bend,' is a technique that evolved due to the necessity to bend harder/ less pliable oaks into barrel. When applied to the more traditional wine oaks such as Quercus Petraea & Quercus Alba, some distinctive characteristics provide a unique flavour proposition for your varietals.



When 'Immersing' the shook into the tank, we are able to leach further oak tannins from the wood than we would otherwise do when 'Fire bending'. This generally implies that the final oak reaction with wine in this barrel type is quite subtle. Experiences with tastings have also revealed that this bend type can assist with mid palate oak structure and length. We also note the absence of guaiacols (charr) when toasting with this bend type.

Integration time with wine varies with regard to the cultivars but we generally note that it will take place from 3 through to 12 months.