



BOUCHARD COOPERAGES  
NEW ZEALAND LTD.

# JARRES, EGGS & AMPHORAE PORTFOLIO

## 2022 NEW ZEALAND

*Grés Sandstone Jarres • Cocciopesto & Cemento Eggs*  
*• Impruneta Terra Cotta Amphorae •*



*A commitment to quality and customer service.*



[WWW.BOUCHARDCOOPERAGES.COM](http://WWW.BOUCHARDCOOPERAGES.COM)

Roberta Manell Montero - Sales & Technical Info  
Erin Shull - Accounts & Logistics

027 424 6929  
027 420 5164

roberta@bouchardcooperages.com  
erin@bouchardcooperages.com

# NON-OAK VESSEL COMPARISON 2022



MATERIAL	<i>Sandstone/Stoneware</i>	<i>Inpruneta Terracotta</i>	<i>Cocciopesto</i>
SUPPLIERS			
ORIGIN	<b>FRANCE</b>	<b>ITALY</b>	<b>ITALY</b>
COMPOSITION	<ul style="list-style-type: none"> <li>Clay composed of 65.04% silica (also known as quartz)</li> </ul>	<ul style="list-style-type: none"> <li>Clay with a high percentage of a calcareous mineral deposit termed "gallestro" in Tuscan dialect</li> </ul>	<ul style="list-style-type: none"> <li>An aggregate of stone, gravel, sand, terracotta, marl stone and clay brought together with a binding agent low in heavy metals</li> </ul>
THICKNESS (cm)	3	3	8
VOLUME (L)	230-1,200	220-1,000	350-2,500
PRODUCTION	<ul style="list-style-type: none"> <li>Assembled in layers that are fired at 1320 C</li> </ul>	<ul style="list-style-type: none"> <li>Made in molds or by hand that are fired at 1020 C</li> </ul>	<ul style="list-style-type: none"> <li>Air dried in molds</li> </ul>
POROSITY (%)	2.5 (Oak barrel porosity = 5%)	6-12	Depending on volume
PORE DIAMETER (microns)	0.4-1.1	0.4-1.1	n/a
WINEMAKING	<ul style="list-style-type: none"> <li>Fermentation of whites</li> <li>Ageing of whites &amp; reds</li> </ul>	<ul style="list-style-type: none"> <li>Fermentation of whites &amp; reds</li> <li>Ageing of whites &amp; reds</li> </ul>	<ul style="list-style-type: none"> <li>Fermentation of whites &amp; reds</li> <li>Ageing of whites &amp; reds</li> </ul>
AGEING TIME	<ul style="list-style-type: none"> <li>Long ageing</li> <li>Slow micro-oxidation</li> </ul>	<ul style="list-style-type: none"> <li>Fast ageing</li> <li>High micro-oxidation</li> </ul>	Varied
STYLE	<ul style="list-style-type: none"> <li>Caters best to linear, high tension, tight, focused, vibrant styles of wines</li> </ul>	<ul style="list-style-type: none"> <li>Softens tannins and mouthfeel and expresses varietal characteristics</li> </ul>	<ul style="list-style-type: none"> <li>Adds texture and retains brightness and varietal characteristics</li> </ul>
VARIETALS	<ul style="list-style-type: none"> <li>Aromatic and textural whites or elegant, light skinned bright reds</li> </ul>	<ul style="list-style-type: none"> <li>Powerful, tannic, thick, reductive red skinned grapes</li> </ul>	Varied
UNIQUE FEATURES	<ul style="list-style-type: none"> <li>Different shapes that promote fluid dynamics and promote more or less texture in the wine</li> </ul>	<ul style="list-style-type: none"> <li>External hatch door makes emptying red ferments easy</li> <li>Gallestro contains very good thermal inertia characteristics</li> </ul>	<ul style="list-style-type: none"> <li>Very good thermal inertia characteristics for drawing out ferments and maintaining a constant temperature</li> </ul>
PREPARATION	<ul style="list-style-type: none"> <li>Warm water</li> </ul>	<ul style="list-style-type: none"> <li>Mild 5% tartaric acid soak</li> </ul>	<ul style="list-style-type: none"> <li>Mild 5-8% tartaric acid rinse</li> </ul>

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# VIN ET TERRE

## Grés Sandstone Jars



Vin et Terre was founded by **Patrick Lalanne** in **Bordeaux France** and produces different styles of "jarres" or jars made of "grés" or sandstone for the fermentation and aging of wines. For over forty years Patrick has supplied the French wine industry with winemaking materials and has always been impressed by the results of ceramic vessels for aging wine. With contacts in the ceramic industry, Patrick decided to design and patent his own product range of **grés jarres** for winemaking purposes.

### MATERIAL

Vin et Terre crafts their jarres exclusively from grés, which contains a high concentration of **SiO<sub>2</sub>**, found naturally in "silex," also known as quartz. Once cooked, grès is extremely durable over time.



1000L Zen in a cellar in the Mâconnais.



350L Coralie, 1000L Zen and 1200L Zen in a cellar.

### HISTORY

The craftsmanship technique of these jarres was invented by Chinese **ceramic specialists along the Yellow River in 1500 BC** and was later developed in Northern Europe.

### PRODUCTION

The jarres are **assembled by hand** via different layers of sandstone clay. The finished jarre is then cooked at over **1300 degrees Celsius** or 2372 degrees Fahrenheit. After being cooked, the jarres are extremely durable and resistant to chemical and temperature changes, and have walls about **3 cm thick**.

The jarres are made from natural materials and the smooth interior makes them easy to clean. The jarres have very strong natural thermal inertia characteristics. For some jarres, Vin et Terre does a salt glaze finishing on the exterior of the jarre to make it smoother and easier to clean. The salt glaze does not change the porosity of the grés.

### POROSITY

Once cooked, the porosity of the vessel is **less than 2.5%** (the porosity of an oak barrel is between 3% - 5%) and the average radius of the pores is 0.004 micron. This allows for a **very slow and extended micro-oxidation** process that can easily be controlled and monitored.

### WINEMAKING & STYLES OF WINE

The jarres perform best for the fermentation and élevage of **white wines** or **very delicate elegant reds** and have good thermal inertia characteristics. The different models allow for different **natural fluid dynamics** that impact the rate of the élevage of the wine.

These jarres allow the wines to express their **varietal characteristics** and **showcase their crystalline and mineral components** resulting in very **pure, linear, fresh and high tension** wines that completely respect the fruit and vineyard. Because of a reduced porosity, extended aging time is advisable.



500L Coralie and a 300L Ovo Couché.



**2022 NEW ZEALAND PRICES**  
**VIN ET TERRE: Grés Sandstone Jars**

Your invoice will be in \$NZD based on the exchange rate at the date of invoice. 30% deposit due at order confirmation with 70% balance due before delivery to the winery. Below prices do not include GST.

PRODUCT	VOLUME (L)	WEIGHT (KG)	HEIGHT (CM)	DIAMETER (CM)	OPENING DIAMETER (CM)	PRICE
ZEN 500L	500	200	110	90	40	4,995 €
ZEN 1000L	1000	320	155	110	50	7,330 €
ZEN 1200L	1200	390	175	110	50	7,995 €
<b>INCLUDED ACCESSORIES:</b> Grés sandstone lid with clamps and silicone joint, butterfly valve, inox palette, silicone bung						
CORALIE 320L	320	130	90	83	30	4,505 €
CORALIE 500L	500	200	110	110	40	5,395 €
CORALIE 1000L	1000	250	145	126	50	7,575 €
<b>INCLUDED ACCESSORIES:</b> Grés sandstone lid with clamps, silicone joint, butterfly valve, inox palette, silicone bung						
OVO COUCHÉ 230L	230	100	70	104	5	4,195 €
OVO COUCHÉ 300L	300	130	80	115	5	4,570 €
<b>NEW</b> SATINE 700L	700	220	133	98	50	7,340 €
<b>INCLUDED ACCESSORIES:</b> Grés sandstone lid with clamps, silicone joint, butterfly valve, inox palette, silicone bung						

- All custom orders must be confirmed no later than 24 September.
- All prices are listed in Euros (€) and include duty, customs, and transport to our warehouse in Christchurch.



## ACCESORIES

### Vin et Terre's Grés Jarres

ACCESSORY	APPLICABLE ON	PRICE
INOX PALLET SUPPORT 	All upright jarres include a stainless steel pallet jack friendly base support system.	Included
INOX LID 	<ul style="list-style-type: none"> <li>■ Zen: 500L, 1000L</li> <li>■ Coralie: 500L, 1000L</li> <li>■ Satine: 700L</li> </ul> <p>*Highly recommended</p>	345 €
COLMATORE GLASS BUNG SYSTEM 	<ul style="list-style-type: none"> <li>■ All Jarres</li> <li>■ 34 cm tall</li> <li>■ 45 cm tall</li> </ul>	105 € 135 €
SAMPLE VALVE 	<ul style="list-style-type: none"> <li>■ Zen: 500L, 1000L, 1200L</li> <li>■ Coralie: 500L, 1000L</li> <li>■ Satine: 700L</li> </ul> <p>*Subject to availability.</p>	128 €
RACKING AND FULL DISCHARGE VALVE 	<ul style="list-style-type: none"> <li>■ Zen: 1000L, 1200L</li> <li>■ Coralie: 1000L</li> </ul> <p>*Subject to availability.</p>	390 €
OVO COUCHÉ ROTARY SUPPORT SYSTEM 	<ul style="list-style-type: none"> <li>■ Ovo couchè:           <ul style="list-style-type: none"> <li>■ 230 L</li> <li>■ 300 L</li> </ul> </li> </ul>	300 €



## MOVEMENT STUDY OF WINE INSIDE Vin et Terre's Grés Jarres

\*Made by the Celsius Laboratory located next to Lyon

### THERMAL CONDUCTIVITY

Thermal conductivity is a quantity introduced to quantify the ability of a structure to conduct heat, represented by the unit  $\text{Wm}^{-1} \text{k}^{-1}$ .

Conductivity of the different main materials used for the storage of wine are:

MATERIAL	CONDUCTIVITY ( $\text{WM}^{-1} \text{K}^{-1}$ )
Oak	0.16
Terra Cotta	0.83
Grès	1.30
Concrete	2-5
Stainless Steel	26

**GRÉS IS THEREFORE A MATERIAL THAT IS NOT VERY CONDUCTIVE AND CAN BE TERMED AN INSULATE**

### MOVEMENT

**The movement of a liquid is dependent on:**

- The temperature gradient acts as the energy for movement
- Gravity is the motor
- The form is the accelerator or the brake

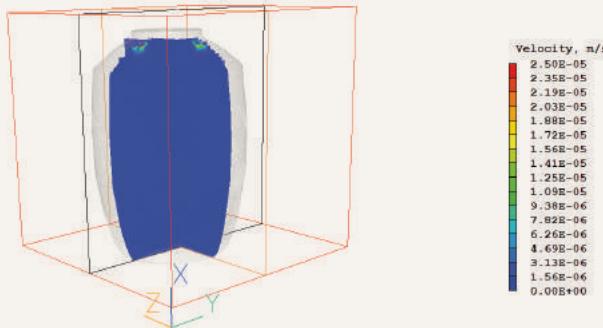
#### FORM OF JARRE ZEN CORALIE OVO DIVINE

Average Speed in cm/day inside of the jarre provoked by a thermal gradient of $3^{\circ}\text{C}$	8	43	52	130
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For example, if we compare the movement of the wine in the form of the standing egg (Ovo) made in other materials, it would yield the following results:

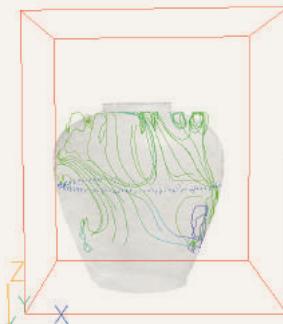
- Oak : 17 cm/day
- Concrete : 60 cm/day
- Inox : 69 cm/day

#### ZEN JARRE FLUID DYNAMICS



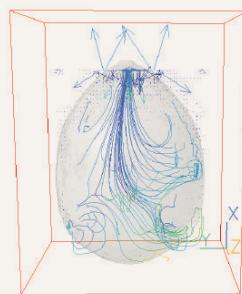
The shape of the Zen jarre has no curvature to give movement to the wine allowing the wine to rest peacefully with very little movement

#### CORALIE JARRE FLUID DYNAMICS



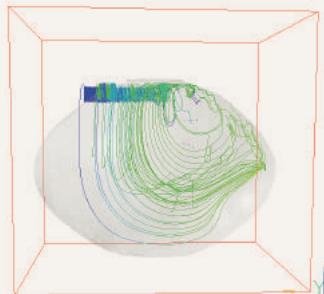
The shape of the Coralie jarre allows the wine to be tranquil with some very weak movement which allows for the enological quality of a slow exchange of tannin in the wine.

#### OVO JARRE FLUID DYNAMICS



The shape of the Ovo jarre allows for a movement from top to bottom with some random circulation. It allows for some uncertain agitation that further develops the wine's texture.

#### OVO COUCHÉ FLUID DYNAMICS



The Ovo Couché jarre with its elliptical shape allows for the propagation, acceleration and recirculation of the wine inside of the jarre.

# VIN ET TERRE GRÉS

## French Winery References



\*FOR REFERENCES IN OTHER COUNTRIES, PLEASE CONTACT US

**BORDEAUX** — Château Guadet // Château Meylet // Château Mangot // Chateau La Dauphine // Domaine de l'Amandière // Château Laplagnotte Bellevue // Château La Closerie du Chêne // Château Doyac // Château Gombaude Guillot // Château La Tribune // Château Mons La Graveyre à Cambes // Château Béchereau/M. Dupas Joel // Château Pabus // Domaine Serge Thierry // Domaine Les Carmels // Vignobles Chauveau/Targon // Château Lagrange (Vignobles Lacoste) // Château de Piote // Château L'Escarde // Château Les Graves de Viaud // Château Peybonhomme Les Tours // Château Roland La Garde // Château Coulonge [Mourens] // Clos Le Petit Badon // Château Laplagnote Bellevue // Vins Olivier Cazenave // Domaine de Chevalier // Château Montlabert // Château de Graviers // Château Bousquet

**BOURGOGNE / BEAUJOLAIS / JURA** — **BOURGOGNE** Domaine Michelot // Domaine Bonneau du Martray // Domaine Roulot // Domaine Morey Coffinet // Domaine Bouzereau // Domaine Fourrier SAS // Maison Joseph Drouhin // Roux Père et Fils // Domaine Jean Féry // Domaine Changarnier Domaine Chandon de Briailles // Domaine Antoine Lienhardt // Domaine du Clos des Rocs // Domaine Edouard Vincent // Domaine Eric Forest // Maison Mathias // Domaine Collet // Bernard Defaix // Domaine La Meulière // Domaine Lamarche // Domaine du Clos des Rocs // Le Domaine D'Henry // Domaine Coche-Dury // Domaine Louis Boillot // Domaine Perrot Minot // Domaine Lemarche // Domaine du Clos des Rocs // Domaine de Cassiope // Domaine Edouard Vincent // Domaine Eric Forest // Domaine Robert Denogent **BEAUJOLAIS** Domaine Raphael Beysang // Domaine Bernard Jomain // Domaine Jean Foillard // Domaine Bernard Valette // Domaine Longère // Domaine Nicolas Boudeau // Domaine des Josephins // Domaine Tano Péchard // Domaine Chignard Cédric // Clos des Mourres // Domaine Gramenon // Domaine de l'Aitonnement // Vignobles Verzier // Domaine Julien Frappa // Domaine Philippe Viet // GFA Pépicherie 69 // Domaine Nicolas Boudeau **JURA** Domaine Ganevat // Domaine Ratte // Fabrice Dodane // Maison Rijkaert // Domaine de La Borde // Domaine de L'Octavin // Domaine de la Touraize

**CHAMPAGNE** — Champagne Bourgeois Diaz // Champagne Vouette et Sorbée // Champagne Van Belle // Champagne Beerens // Champagne Dechannes // Champagne Marcel // Champagne Christian Piolot // Champagne Veuve Clicquot // Champagne Pascal Doquet // Champagne Charlot Tanneux // Champagne Coutier René // Gaiffe Hentzien // Champagne Augustin // Champagne Guy Charlemagne // Champagne Waris Larmandier // Lycée viticole d'Avize // Champagne Bonnet Ponson // Champagne Marc // Champagne Sélèque // Champagne Nowak // Champagne Lecomte Père et Fils // Champagne Camille Marcel // Champagne Billecart Salmon // Champagne Piot Sevilliano // Champagne Chailloux Vollereaux // Champagne Lamblot // Champagne Lecomte

**CÔTES DU RHÔNE / PROVENCE / CORSE** — **CÔTES DU RHÔNE** Domaine Monin // Domaine Jamet // Clos des Mourres // Yves Gras/Santaduc // Domaine Saint Gayan (Meffre) // Domaine de Beaurenard // Gaec L'Authentique // Domaine de Cremone // Domaine du Grand Singe // Domaine la Cavalière // Tardieu Lauent // Domaine la Ville Rouge // Maison Ogier // Domaine Beaurenard **PROVENCE** Clos Saint Joseph // Château de Fontcreuse // Clos Sainte Magdeleine // Domaine de St Ser // Domaine de Garbelle // Domaine Balcon // Domaine La Mongestine // Domaine La Madrague // Château de Pibarnon // La Tour des Videaux // Chateau Lafoux // Valérie Courrèges // Domaine de la Fouquette // Château de Peyrassol // Olivier Varenne // Domaine Costebonne // Domaine Val de Caire // Domaine de Garbelle **CORSE** Domaine Vico // Clos Culombu // APM Vins Aurélie Patacchini // Domaine San Quilico // Domaine de Pietrella // Domaine Comte Peraldi // Domaine Saparal // Domaine San Quilico (Orenga)

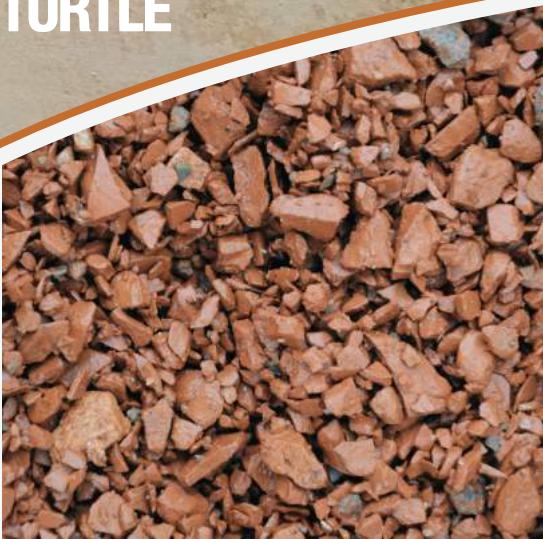
**LANGUEDOC** — Domaine Gayda // Château La Baronne // Domaine Les Clos Perdus // Château Montfin // Domaine Ste Marie des Crozes // Mas Zenitude // Domaine Terres des Cambon // Domaine La Sorga // Vins Submarine (McGroarty) // Mas Foulaquier // Domaine Romain Plon // Château Coupe Roses // Domaine Quartironi/Pradel // Domaine Bordes // Le Clos du Gravillas // Domaine La Croix Gratiot // Mas de Cyanque // Le Temps Fait Tout // Les Vignes Oubliées // Mas des Mesures // Domaine de la Courbaire // Domaine Des Pierres Bleues // Domaine Thuronis // Château Montfin // Domaine Ste Marie des Crozes // Château Beauregard Mirouze // Mas Julien // Domaine Frederic Brouca // Terre des Dames // Mas du Novi // Mas des Navas

**ROUSSILLON** — Mas Amiel // Château de l'Ou // Domaine des Demoiselles // Vignobles Reveille // Dom Matassa // Dom Jean Gardies // Dom des enfants // Dom Calimas // Dom de l'Arca // Dom J Pierre Mignot // Domaine de Schistes // Domaine Brial // Vignobles Reveille // Olivier Pithon // Dom Calimas // Dom de l'Arca

**SUD-OUEST** — Domaine Terres de Causses // Château Lassolle/Stéphanie Roussel // Clos Cavenac/Thierry Hudon // Vignobles de la Lègue (ex Chattier) // Vignobles Le Bihan // Domaine Antocyane // L'Enclos des Braves, Rabastens // Domaine de Plaisance // Clos Trotteligotte // Vignobles Brumont // Domaine La Pointe // Domaine Pinto // Domaine Grussaute // Vignobles Pyrenaïa // Vignobles Arrivée // Domaine Laurens // Domaine Benoit Montiel // Vins No Control // Domaine de Brin // Domaine de Cantalauze // Domaine Bruno Montels // Languedoc

**SAVOIE / ALSACE** — **SAVOIE** Domaine les Côtes Rousses // Domaine du Perron // Domaine Céline Jacquet // Earl Curtet // Le Mont Blanc // Domaine Belluard // Domaine Les Vignes de Paradis // Domaine Yann Pernuit // Matthieu Appfel // Domaine Pascal et Annick Quenard // Domaine Lambert Gérard // Olivier Gatin // Florent Heritier **ALSACE** Pierre Frick // Domaine Marcel Deiss // Domaine Valentin Zusslin // Domaine Ostertag // Domaine Rémy Gresser // Domaine Jossmeye // Vignobles Klur // Domaine Gross // Domaine Geschickt // Domaine Trapet // Spielman Lambert // Domaine Gross // Domaine André Thomas // Domaine Jossmeye

**VAL DE LOIRE** — La Ferme de la Sansonnière (Mark Angeli) // Domaine de Juchepie // Château Pierre Bise // Domaine Bruno Dubois // Domaine Antoine Sanzay // Domaine Bobinet // Domaine de la Bergerie (Guénard) // Domaine Richou // Domaine de Bablut // Chateau de Fosse Sèche // Clos de l'Elu // Clos de l'Ecotard // Domaine du Caillou à Turquant // Domaine Les Grandes Vignes // Domaine du Vieux Pressoir // Domaine Reignier David // Domaine Les Murailles Neuves // Domaine des Varinelles // Domaine Loic Mahé // Domaine Pierre Ménard // L'Austral // Manoir de La Tête Rouge // Château de Bois Brinçon // Domaine Joulin // Domaine de la Renière // Domaine Damien Laureau // Domaine Les Chesnaises : Béatrice et Pascal Lambert // Amirault Yannick // La Gardière : Sébastien David // Clos des Quarterons (Amirault) // Domaine de L'écu // Domaine Michel Bedouet // Stéphane Orioux // Saget la Perrière// Domaine Grandes Espérances // Domaine Gilbert // Paul Fouassier // Domaine Mardon // Vincent Carême // Domaine Frantz Saumon // Marie Thibault // Domaine Mérias Benoit // Le Sot de l'Ange (Quentin Bourse) // La Ferme du Plateau // Jacquelain Rouvre // Domaine Hervé Villemade // Domaine Claude Courtois // Clos du Tue Boef // G'M Claude Marquet // Domaine des Jumeaux // Domaine Les Terres d'Ocre // Domaine de la Bergerie // Domaine Les Grandes Vignes // Château Pierre Bise // Domaine de la Turière // Jezequel // Domaine Tabordet // Vignobles Joseph Mellot // Domaine Henry Pelle // Monmousseau // Domaine Moyer // Château La Roche en Loire // Domaine la Grange Tiphaïne // Domaine de la Barbinière // Domaine Damien Laureau // Domaine Henry Pelle



Terracotta and other Italian stone aggregates that make Cocciopesto.

## DRUNK TURTLE

### Cocciopesto and Cemento

Drunk Turtle is a family-owned company located in Tuscany that has rediscovered the use of **Cocciopesto for winemaking (fermentation and aging) in the form of Cocciopesto eggs that they call Opus**. They are best known for their Cocciopesto eggs because of the material's advantages and lower CO<sub>2</sub> production footprint as compared to cemento.

#### MATERIAL

Cocciopesto is a very durable ancient Roman building material that is crafted from a mix of Italian stone, sand, marl stone and terracotta that is all brought together with a natural binding agent that is extremely low in heavy metal content. In fact, it is so low in heavy metal content that alimentary goods can be put in direct contact with it. The material is also less basic than cemento, therefore only a very light tartaric acid neutralization treatment is needed before usage.



Opus 10 ready to fill.

#### HISTORY

Cocciopesto was used by the **ancient Romans as a building material** for the transportation of water around the Roman empire by aqueducts and viaducts. But the **material was also crafted into wine transportation vessels**. Through recent discoveries and comparative experiments with Drunk Turtle's cemento eggs, Drunk Turtle primarily crafts their eggs in cocciopesto as opposed to cemento.

#### PRODUCTION

The cocciopesto is mixed and then **poured by hand into molds** and then left to air dry over a couple months. The molds contain two pieces that are then assembled and jointed together with the **vessels' wall being around 8 cm thick**. Once dry, the eggs need to be treated with a **light tartaric acid solution** to neutralize the basic limestone content in the cocciopesto so as to not increase the pH of the wine.



Cocciopesto Opus 17s.

#### POROSITY

The porosity of **untreated cocciopesto varies between 2% - 5%**. However, once a thin layer of tartaric acid is applied, the porosity of the opus changes. The porosity of the Opus (along with other vessels) decreases over time.

#### WINEMAKING & STYLES OF WINE

Cocciopesto **contains bits of Impruneta terracotta inside the mix** and therefore the eggs show **thermal inertia characteristics** in terms of fermentation qualities. Meaning, the vessels will **lengthen the ferment over time** without any temperature spikes, thus **adding complexity and more fruit-driven notes to the ferment**.

The egg's practical external hatch doors make emptying them very easy. Because the vessels have a lower porosity than terracotta, they **cater to brighter, higher tension and more elegant reds and whites**. The natural egg shape keeps the lees in constant suspension, heightening the wine's **textural qualities**.

# 2022 NEW ZEALAND PRICES

*Cocciopesto & Cemento Eggs*

Made in Italy



Your invoice will be in \$NZD based on the exchange rate at the date of invoice.

30% deposit due at order confirmation with 70% balance due before delivery to the winery.

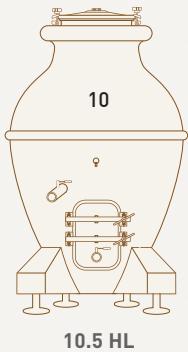
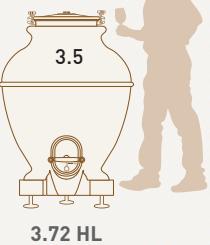
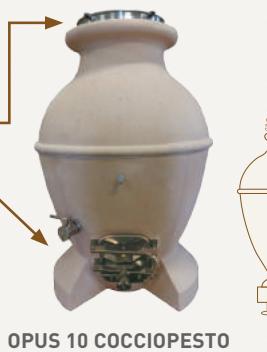
Below prices do not include GST.

PRODUCT	VOLUME (L)	WEIGHT (KG)	HEIGHT (CM)	DIAMETER (CM)	COCCIOPESTO	CEMENTO
OPUS 3.5 (exactly 3.72 HL)	372	550	117	97	5,280 €	4,650 €
OPUS 10 (exactly 10.5 HL)	1050	1250	192	130	9,995 €	8,540 €
<b>NEW</b> OPUS 15 (exactly 15 HL)	1500	1560	224	147	11,995 €	10,195 €

- Each OPUS includes a “5 point system” stainless steel top door, a stainless steel oval external opening door, a draining valve, a racking valve (only for 10HL and 15HL) and a tasting valve.
- All custom orders must be confirmed no later than 24 September.
- All prices are listed in Euros (€) and include duty, customs, and transport to our warehouse in Christchurch.

## FEATURES

- Silicone gaskets on top and external opening door
- 5 point system top door
- Forklift friendly feet system
- All accessories are ASI 316 stainless steel
- All Opuses (including the 3.5) have a sample valve



## OPTIONAL ACCESSORIES

	PRICE
External Color Customization	OPUS 3.5HL 300 € OPUS 10HL 400 € OPUS 15HL 600 €
	135 €
Internal Food Grade Epoxy Coating for: Cemento OPUS 3.5 / 10 / 15	375 € 525 €

- Safety ladder brackets, thermometer, internal cooling plates and custom exterior decoration available upon request.
- No metal rebar or netting used in structure and mixture.
- Can be used for fermentation, aging, or both.



**ARTENOVA**  
TERRECOTTE • Impruneta



Leonardo Parisi (left) from Artenova with some 700L eggs.

## ARTENOVA

### Impruneta, Terracotta, Amphorae

Artenova is a family run business that specializes in the creation of winemaker friendly Impruneta terracotta amphorae for winemaking and beverage alcohol. The company is located in **Impruneta, Tuscany** which is the city that gave Impruneta terracotta its name. The company has a rich history working with the clay of the surrounding area and through a collaboration approach with wineries around the world, it has **established itself as a leading manufacturer of Impruneta terra cotta amphorae**. Every two years, Artenova hosts the infamous cultural wine tasting event, “**La Terracotta e il vino**” where **producers from everywhere in the world come to exhibit and taste wines made in amphora**.

#### MATERIAL

Impruneta terracotta is famous because of its **mineralogical composition that is low in metals**, with the most sought after representations coming from around Tuscany's Impruneta area. Here the clay has **high levels of a calcareous residual called “galestro,” which makes it a natural heat sink**.



Colombino technique being applied to make a classic amphora.

#### HISTORY

Terracotta, which translates to “baked earth,” remains the oldest ceramic that man has created, with traces of it appearing **6000 years BC**. It was later discovered in Tuscany and Impruneta by the Etruscans around 700 years BC. While terra cotta can be found everywhere, the **uniqueness of Impruneta terracotta** is its **high levels of galestro, crucial for making wine amphora**.

#### PRODUCTION

The amphorae are **handmade** either via the traditional **“colombino” technique**, where the clay is hand rolled into coils and built **30 cm high per day**, or using a method where the clay is placed in molds. Before being cooked, the amphorae need to undergo a **7 week air drying process** where they will lose **10 - 15% of their weight due to water evaporation**. The amphorae are then cooked in large ovens that reach 1020 degrees Celsius or **1868 degrees Fahrenheit**.



Classic 500L “jar” amphorae lined in a cellar.

#### POROSITY

Once cooked, the porosity is between **6-12%**, sometimes even a little bit more depending on the amphora's production.

The average radius of the **pores are between 0.4 to 1.1 microns**.

#### WINEMAKING & STYLES OF WINE

Impruneta terracotta works very well for the **fermentation of reds** because they naturally draw the fermentation out **without any stalling or temperature spikes**. The vessels have very practical external doors for emptying.

For aging, they work best on bold, tannic and reductive reds because of the increased micro-oxidation qualities. **Due to their increased porosity and permeability, shorter aging times are advised**.

## 2022 NEW ZEALAND PRICES

*Traditional Impruneta Terracotta Amphorae*  
Handmade in Tuscany



**ARTENOVA**  
TERRECOTTE • Impruneta

Your invoice will be in \$NZD based on the exchange rate at the date of invoice.  
30% deposit due at order confirmation with 70% balance due before delivery to the winery.  
Below prices do not include GST.

	PRODUCT	VOLUME (L)	WEIGHT (KG)	HEIGHT (CM)	DIAMETER (CM)	PRICE
<b>JAR</b>						
	Jar 500L	500	170	143	97	4,710 €
	Jar 800L	800	200	158	120	7,725 €
■ Each jar comes with a 50 cm diameter stainless steel manhole and 2 inch opening.						
<b>EGG</b>						
	Egg 450L	450	200	122	87	4,465 €
	Egg 700L	700	250	138	107	7,680 €
■ Each egg comes with a 42 cm diameter stainless steel manhole and 2 inch opening.						
<b>DOLIUM</b>						
	Dolium 500L	500	180	122	107	5,860 €
	Dolium 1000L	1000	320	148	122	7,050 €
■ Each egg comes with a 42 cm diameter stainless steel manhole and 2 inch opening.						
<b>HORIZONTAL EGG</b>						
	Horizontal Egg 220L	220	130	87	102	3,400 €
	Horizontal Egg 450L	450	200	102	122	5,575 €
■ 220L horizontal egg comes with a 15 cm diameter stainless steel manhole and 2 inch opening. ■ 450L horizontal egg comes with a 30 cm diameter stainless steel manhole and 2 inch opening.						

### OPTIONAL ACCESSORIES (ADDITIONAL ACCESSORIES AVAILABLE UPON REQUEST)

LARGE COLMATORE 135 €



INOX BASE WITH WHEELS 1 660 €



INOX BASE WITH WHEELS 2 660 €



INOX BASE NO WHEELS 660 €



2" TRI-CLOVER BALL VALVE 198 €



SAMPLE VALVE 66 €



■ All custom orders must be confirmed no later than 24 September.

■ All prices are listed in Euros (€) and include duty, customs, and transport to our warehouse in Christchurch.



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NEW ZEALAND LTD.

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Roberta Manell Montero - Sales & Technical Info  
Erin Shull - Accounts & Logistics

027 424 6929  
027 420 5164

roberta@bouchardcooperages.com  
erin@bouchardcooperages.com