

# IT'S ALL NOW

The cone, the sphere, the ellipsoid, the tulip, the truncated pyramid – wine vats come in a bewildering array of shapes these days, but none has made as much of an impact on the 21st-century wine world as the egg.

The advantages of the egg-shaped vessel are several. As carbon dioxide rises through the must during fermentation, the ovoid shape creates a convection current – like a natural pump-over – which facilitates homogeneity of the must and uniform fermentations. If the wine remains in the egg for maturation, that current continues.

Werner Michlits of Meinklang in Austria explains that as heavier molecules in the wine polymerise, they sink to the bottom of the vessel and push lighter ones upwards. This creates a continuous battonage, increasing lees contact and enhancing the wine's texture.

Benefiting from the flavour neutrality and micro-oxygenating properties of the materials they are made of (concrete, clay, high-vitrification ceramics), eggs also promote fruit purity and aromatics. Some biodynamic producers point out that the egg shape is central to a holistic philosophy, as it also represents the golden ratio, that so-called

# NOW

**No serious winery would be seen dead nowadays without at least one egg-shaped fermenter. But why have they become so popular and what effect do they have on the wine? DARREN SMITH examines Project Sphere**

'sacred geometry' of natural harmony.

French vat manufacturer Marc Nomblot was the first modern-day commercial producer of egg-shaped tanks, using concrete. Nomblot began

crafting specialised concrete tanks in the 1980s. But it was a 2001 commission from Rhône legend Michel Chapoutier that gave rise to the concrete egg as we know it today.

While concrete is by far the most common material for egg-shaped wine vessels, it's not the only one. In 2012 an American company, Flextank, launched

the first egg-shaped vessels made from durable oxygen-permeable polyethylene.

They're relatively cheap – the Orion 20hl egg tank costs \$2,525 (£2,014), compared to a Nomblot 17hl egg that costs €6,100 (£5,515). Recyclable and easy to clean, Flextanks are built to last up to 20 years – that's more than double the life of oak barrels. They also come in heavyweight and lightweight options, which, the manufacturer says, simulate the micro-oxygenation processes of neutral and two-year-old oak barrels, respectively.

Slovakian producer Slobodne has reported early positive results from its two Flextanks, which have joined its handsome collection of *qvevris* and *tinajas*.

If you're a winery with money to burn, you can also invest in the Rolls-Royce of egg-shaped vats – the Taransaud Ovum.

**'The wines coming from amphorae are bright, high-toned and compelling'**

ANDREW  
BECKHAM

GRAPHIC: MEG GEORGEON; IMAGES: ISTOCK





DIFFERENT DESIGNS OF EGGS ON DISPLAY AT (FROM LEFT) CHILE'S DEMARTINO; SOUTH AFRICA'S BOEKENHOUTSKLOOF AND OREGON'S BECKHAM ESTATE

Launched in 2010, this 20hl vessel is priced at €45,000 (£38,984) and has been snapped up by wineries across the world, including Domaine de Chevalier in Bordeaux, Drappier in Champagne, Biblia Chora in Northern Greece and Tony Bish Wines in Napier, New Zealand.

When it comes to wine quality, however, the Taransaud Ovum may not be the last word. The best material for ovoid containers, according to Australian master craftsman Philip Sedgman, is ceramic.

Sedgman is an expert in flowform structures – water-flow devices associated with biodynamics. His elegant 675l Magnum 675 ceramic egg, priced at AUD\$6,750 (£3,882), was inspired by the 'Natural Selection Theory' group of winemakers: Tom Shobbrook, James Erskine, Sam Hughes and Anton Von Klopper.

These Aussie winemakers tell Sedgman that the wine they produce in their 12mm-thick, 675l Magnums tends to be 'fine through the palate with an impressive width of finish, with more elegance and finer minerality compared with oak'.

Sedgman notes a distinction between ceramic and clay. 'The difference between ceramics and terracotta,' he says, 'is essentially the heat of firing, and the higher quality and finer grade of the clays used.'

'Ceramic vessels are fired between 1,250°C and 1,300°C. This makes them naturally less porous than older styles of clay vessels fired at lower temperatures, which can't achieve the same vitrification.'

'This gives the ceramic amphora an edge over all other materials used for

wine fermentation, allowing for optimal micro-porosity without the contamination and decay exhibited by other vessels.'

Over the past seven years, Sedgman's company has supplied almost 250 Magnum 675s to 46 wineries, from boutique ones like Ambyth Estate in Paso Robles to bigger estates like Yangarra in McLaren Vale. But supply may become a problem – Sedgman is nearing retirement and currently does not have anyone to take over what is an extremely specialised craft.

## CLASSIC QVEVRI

With its 8,000 years of history, the Georgian qvevri is the archetypal – albeit inverted – egg-shaped vessel. John Wurdeman of Pheasant's Tears in Kakheti, Georgia, explains that the qvevri's distinctive physical features are its large size – up to 4,000l, though more typically 1,000 to 2,500l – and the fact that it is traditionally buried underground as a rudimentary sort of temperature control.

The qvevri remains porous even after being coated inside with neutral beeswax. This allows the wine to micro-oxygenate, adding depth and structure in the same way oak would, without imparting oak flavour.

In neighbouring Armenia, the karas performs a very similar function. As with qvevris, their precise effect depends on the

type of clay used, its porosity and thickness. Although karas-making has become an obsolete craft in Armenia, Zorah Wines in Vayots Dzor is working to revive it by setting up a school on its estate. Interest in their use is beginning to stir, according to Zorik Gharibian of Zorah Wines.

'When we first started Zorah almost two decades ago there was no interest,' he says. 'Two decades on, other wineries in Armenia have decided to

experiment with winemaking in karas. There are now four [wineries] besides Zorah working with the vessels.'

Also important in the egg-shaped terracotta wine vessel world are the talha from Portugal (see page 62), and the tinaja from Spain. Recovered examples of these vessels appear to have been modelled on the squat ovoid form of the Roman dolia. Talhas have been used to make wine in Alentejo since the Roman era.

While Alentejo's talhas have retained their historic shape, the tiñaja has been adapted over time. Elisabetta Foradori in Trentino uses two shapes: the curved panciuta (her son, Theo Zierock, calls them 'uterus-shaped', though they could also be said to have an inverted egg-shaped appearance) and the flat-sided cilindrica.

Zierock says panciutas allow for constant movement of the wine within, promoting fruit concentration and structural breadth.

*In qvevri  
the wine can  
micro-oxygenate  
like it would in a  
barrel, but without  
imparting oak  
flavour*

## LOVE IT... AND LIST IT

From Crete to California, somms pick their favourite egg-fermented wines



**JOSEPH RADFORD, DIRECTOR,  
TIMBERYARD**

**Tillingham Wines Qvevri  
Artego Ortega, East Sussex**

Ben Waldgate's Qvevri Artego is aged in clay vessels he buries underground to naturally help maintain a consistency in temperature. The ageing in qvevri encourages increased lees action to give mouthfeel and the extended maceration on skins gives a beautiful tannic backbone. I love this wine and can't wait to taste more releases in the coming years.



**MONIQUE ZIERVOGEL, HEAD  
SOMMELIER, SPRING**

**Elisabetta Foradori Fuoripista  
Pinot Grigio, Trentino**

There is no other Pinot Grigio like this one. An orange wine with a good eight months' skin contact in tinajas, it is textured and complex, with notes of orange blossom, red berry fruit and even a hint of black tea. It's a bold wine on my list that encourages some fun conversation with guests.



**BASTIEN FERRI, HEAD  
SOMMELIER, FRENCHIE**

**Dirty & Rowdy,  
Semillon, California**

It shows a restrained, classy and focused Semillon profile. Light in alcohol at around 11.4%, it packs quite a punch of pepper, dried lemon zest and earthiness. The egg fermentation on skin brings texture and weight and more mellow aromatics and mouthfeel to this grape. It also shows a lot of interest after a few years in bottle, with a zingy citrus acidity and a light waxy sensation.



**ALEXIOS STASINOPOULOS, HEAD  
SOMMELIER, THE TUDOR ROOM**

**Oenops Vidiano, Crete**

Winemaker and oenologist of the company, Nikos Karatzas masterfully uses concrete eggs to ferment this gem, highlighting Vidiano's complex richness in body, but also leaving intact its stone- and citrus-fruit zestiness, alongside its characteristic pebble minerality.



Wines aged in cilindricas, by contrast, lose fruit concentration and become finer. Zierock's experience is that the greater the level of movement inside the panciutas, the greater the risk of volatile acidity.

The tiñaja has just as important a role in Chile's winemaking history. The first wines made in Chile were fermented and aged in tinajas brought to the country by Spanish conquistadors in the 1550s. De Martino owns 150 restored tinajas – from 250 to 1,600 – and uses them to ferment and mature its Viejas Tiñajas range.

'The Chilean tinaja was always placed overground,' notes Sebastian de Martino. 'Most likely this is linked to culture and probably the fact that it's a seismic country.'

'If used in several vintages, they seal on the inside and can create wines that are pure and pristine. There's an edge in these wines, reflected in a grip that could be explained by the clay influence. They're a tribute to the first wines of our country.'

### EGGS GO GLOBAL

The spread of these ancient ovoid vessels across the modern wine world is striking. Tuscany-based Artenova was the first

company in Italy to revive the use of terracotta for winemaking. The company serves more than 300 clients globally, producing everything from vertical and horizontal egg-shaped vessels to amphora-style jars and classic dolia. The Manetti family, which owns Chianti estate Fontodi, also has a terracotta vessel business.

In terms of qvevris, well-known modern-day adopters are Thierry Germain, Thierry Puzelat and Hervé Villemade in France; Josko Gravner and Paolo Vodopivec in Italy; and Božidar Zorjan in Slovenia. A few of them have even made their way to East Sussex, where they are now being used by Ben Waldgate of Tillingham Wines.

In Spain, Alicante-based natural winemaker Rafa Bernabé has developed a positive reputation for his wines made using tinajas from master tinajero Juan Padilla in Villarrobledo, south-east of Madrid. In Trentino, Italy, Elisabetta Foradori has around 200 Padilla tinajas (not all ovoid in shape), while COS in Sicily also uses them to excellent effect.

These ancient clay vessels are also crossing new frontiers. In the US, Andrew Beckham of Beckham Estate in Oregon is a

winemaking potter who crafts wine vessels in different shapes and sizes using clay from California. Beckham says that his clay eggs are 'incredible insulators', noting that his own fermentations in clay have generally been much cooler and more prolonged than those in his conventional vessels.

'Fermenting in amphorae I rarely exceed 22 to 23°C,' he says. 'Primary fermentation takes around three weeks to a month. The wines are bright, high-toned and compelling.'

'Ageing wines in the vessels has also yielded some incredibly interesting results,' he adds. 'There is a common textural component that I would liken to dusty brick, and there exists an iron-driven earth tone regardless of varietal.'

Whether you take the long view, back to the wine vessels of the Transcaucasus 8,000 years ago, or look no further than the past few years, the time since which Nombrot's vats have been in commercial production, the wine world has been transformed by the humble egg.

And the range and affordability of materials with which these vessels are now made suggest they will exert an influence on the industry for years to come. ☛