



Mobile Winemaking Services Contract Bottling



Introduction

Having your wine bottled by Winemaking Tasmania's mobile bottling plant is a cost effective alternative to in-house bottling or having to transport finished wine to another winery.

Your wine is bottled when required, using the latest technology and without the need for a large investment in plant and equipment.

Our mobile service is available at short notice and is capable of bottling up to 3,000 bottles per hour. Most common bottle types are catered for and special bottle shapes can be accommodated if required.

Our mobile plant is run by a trained operator, skilled in the full operation of this type of machine. We carry a full set of spares and most of the fittings required to connect to your wine tanks. Whilst our operator is a qualified winemaker, it is your winemaker who is 'in charge' of the process from start to finish. Our operator will work under their direction.

Using our mobile bottling service frees capital and important winery space whilst at the same time allowing the bottling process to be undertaken with the most modern equipment and without compromising quality.



Machinery description

We operate an Italian-made GAI 3032 bottling machine incorporating an unscrambling in-feed table, internal bottle rinser, inert gasser, 16 head light vacuum gravity filler, a vacuum corking station or a screw capping (or crown sealing) station and a rotating out-feed table. All these functions are incorporated in the one machine which can operate at up to 3000 bottles (250 cases) per hour.



Empty bottle in-feed table

The in-feed table allows for 100+ bottles to be easily positioned by one staff member. The bottles are automatically unscrambled and fed into the machine.

Bottle rinser

Each bottle is rinsed, upside down with sterile water, drained and returned to the upright position on the track.

Inert gas injection

Bottles can be purged with either CO₂ or N₂ (winemaker's choice) before they proceed to the filling position. This step can be omitted if requested.

Bottle filling

The bottles are then gravity filled under light vacuum to their exact fill height. The filling heads and header tank are sealed to the atmosphere and are under a constant inert gas blanket.

Closure

Three options are available

A. Screw Cap

The capping head applies a 60 X 30 screw cap to the bottle by applying both top and side (redraw) pressure.

B. Cork

The corking head features the latest technology stainless steel cork jaws complete with cork dust blowers to remove any excess cork dust prior to insertion. The cork is compressed and a vacuum is created in the bottle headspace prior to insertion.

C. Crown seal

The crown seal head places crown seal caps to sparkling wine bottles.

Full bottle out-feed table

The out-feed table collects and holds full bottles prior to packing off into appropriate bins or trays.



Process description

Wine line

Winemaking Tasmania provides all hoses, pumps and fittings to draw wine from most tanks to the bottling machine. Finished wine passes from the feed pump through a 0.45 micron membrane filter to the filler header tank. This filter may be by-passed if not required. The final membrane filter is integrity tested at the beginning and end of each day.

Bottle rinser

Rinse water is pre-filtered through a 5 micron filter, a carbon filter, a 1 micron filter and finally, a 0.45 micron sterile filters prior to use. Used rinse water flows to waste.

The unit comes complete with a portable steam generator for sterilisation prior to bottling. The steam generator uses water filtered to 0.45 microns.

In-line pre-filtration of coarse filtered wine, using Cuno lenticular filters is available as an optional extra.

Process procedure

In most cases all equipment will be delivered to site the day prior to bottling commencing. The machine will be off loaded, levelled and set-up ready for operation.

Pumps, filter housings, hoses and the bottling machine are washed with caustic soda, rinsed with citric acid and then with clean filtered water prior to the commencement of a bottling run.

Screw cap 'down pressure' and 'slip' and 'crack' torque are tested using the latest industry standard equipment.

If corking is required the cork jaws are stripped and cleaned daily.

Fill heights are set at the client's requirements and confirmation of the final fill height is the responsibility of the winemaker.

Prior to bottling commencing, all wine lines are steam sterilised for 15 minutes and then cooled to ambient temperature with sterile water. Membranes (if required) are integrity tested in the presence of the winemaker.

Wine is introduced to the system and the first 20 – 30 litres is drained and returned to the supply tank, to ensure no water is present. Bottling commences and proceeds to batch completion.

Regular checks to ensure 'slip' and 'crack' measurements are within the suppliers specifications and if cork is being used, that an under cork vacuum is present.

At the end of a run all wine in the lines, pump, filters and header tank is bottled by 'pushing through' with N₂.

Wine changes take approximately 30 minutes; wine and bottle changes take approximately 45 minutes.

At the end of each day the machine is thoroughly washed ready for sterilisation the next day.



Winery (client) staff requirements

The winery should provide sufficient staff to load and unload bottles, to keep up the supply of empty bottles and to remove completed bins. In most cases this can be done by 3 staff. The winemaker must be in attendance during the complete bottling process. Our operator will maintain the smooth operation of the machine, top-up the cork / screw-cap hoppers and help where needed.

For large runs or where there may be many wine / bottle changes in a day one extra staff member may be required from time to time.

In general, we like to rotate staff breaks in order to keep the machine running, or to co-ordinate breaks with wine or bottle changes.

The winemaker (client) is responsible for the supervision of their staff.

Specific requirements

Wine

All wines should be cold and protein stable.

Wines containing laccase should have been properly treated with an appropriate enzyme prior to bottling.

Final SO₂ adjustments should have been made and checked.

All additions should have been made prior to bottling.

Wines should be properly de-gassed (less than 1.5 g/l CO₂).

Wine temperature should be between 15°C and 17°C.

An independent laboratory analysis pre and post bottling is recommended.

For wines requiring sterile (0.45 micron) membrane filtration we require that the wine has been pre-filtered to a nominally sterile condition and that this filtration has taken place as close as possible to the time of bottling.

Winemaking Tasmania reserves the right to reject any wines which do not pass our on-board filterability test.

For wines not requiring sterile filtration all on-board filters are by-passed.

Winemaking Tasmania will take 4 bottles as control samples from each of the beginning, middle and end of the run.

These QA samples will be kept by WMT for a period of at least two years.

Final responsibility for wine quality rests with the winemaker.

Power, Water & Location

We require 2 X 20 amp 3 phase outlets (5 pin) and 2 X 240 15 amp outlets.

Approximately 1500 litres of clean potable water per day is required.

A level area approximately 8m X 5m, accessible by a small truck and adjacent to or within the winery must be provided.

We will evaluate each client's facilities upon request.

Inert Gas

If inert gas purging is required prior to filling then a good supply of CO₂ or N₂ is required. It is the winemaker's/client's responsibility to ensure adequate gas flow for purging.

Bottle Types

Most OI standard wine bottle types can be accommodated including a good range of 375ml and sparkling bottles.

Other bottle types may be able to be accommodated. Samples and technical drawings should be provided for evaluation prior to booking.

Closure Types

All cork and artificial cork can be used.

Screw cap closures must be 60mm x 30mm.

Standard crown seals.

Closure specifications should be on hand prior to bottling commencing.

Enquiries about contracting Winemaking Tasmania to conduct this service should be made to:

**Julian Alcorso, Managing Director and Senior Winemaker,
Tel. 0362484445 or email: julian@winetas.com.au.**

For further information on Winemaking Tasmania visit our website: www.winetas.com.au