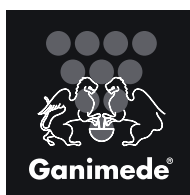


Il fermentatore brevettato - Le fermenteur breveté - El fermentador patentado - The patented fermenter

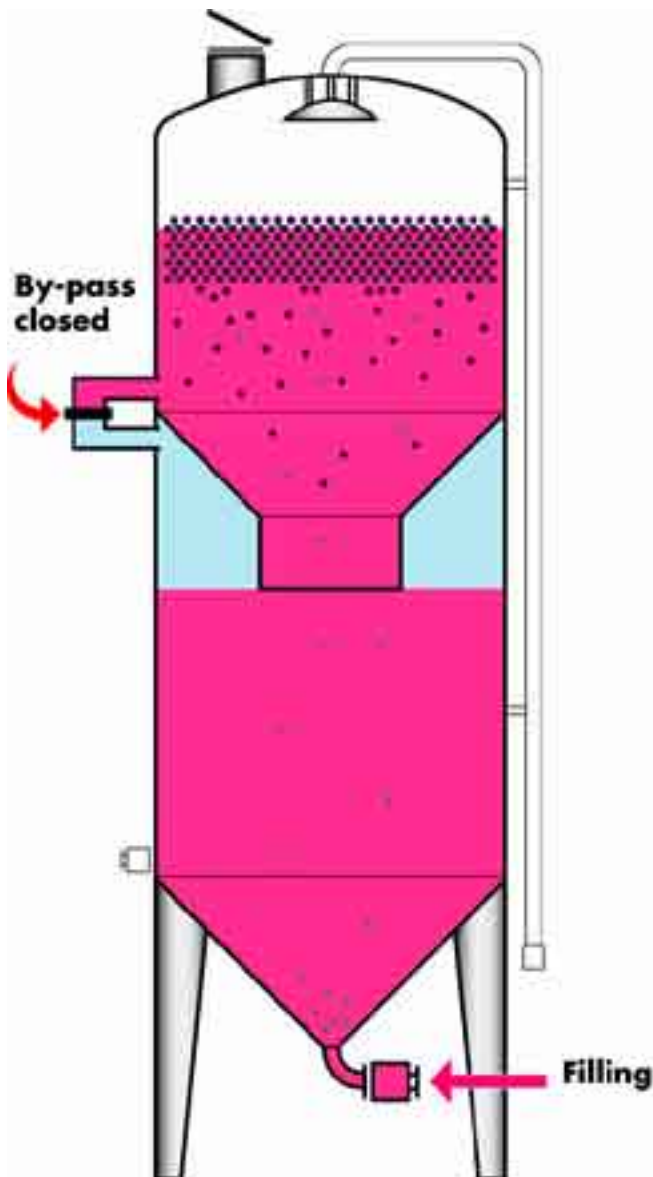
metodo  Ganimede®



Il futuro della tradizione - Le future de la tradition - El futuro de la tradición - The future of tradition

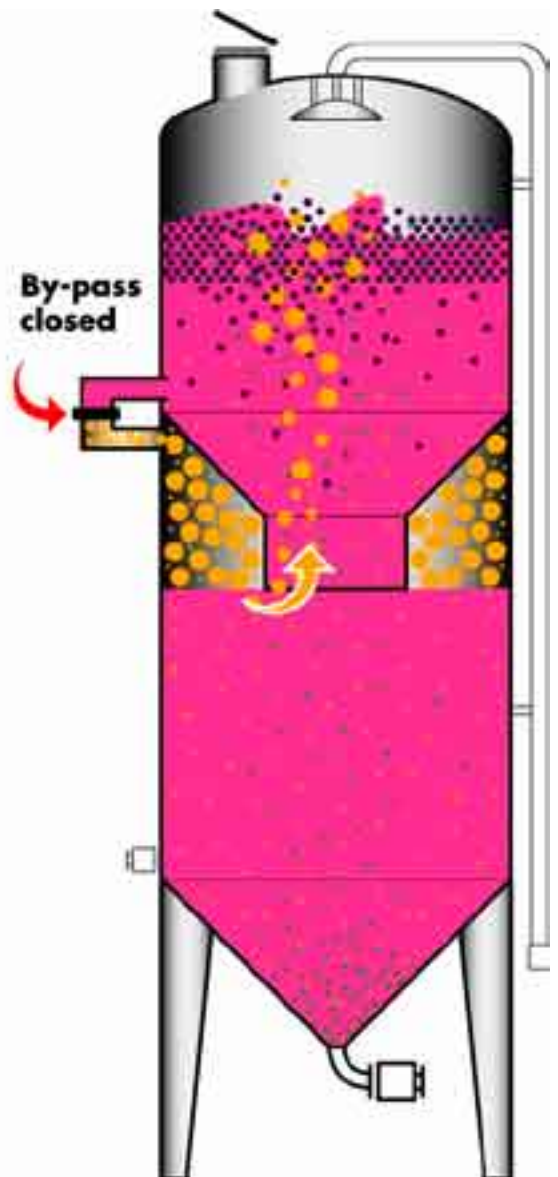
1

Filling with the by-pass closed.



2

Gap saturation.



Ganimede® fermenters can be filled from the top or from the bottom outlet valve or the racking valve.

As the must/marc level rises the space below the diaphragm remains totally empty. The air in this space cannot escape as the by-pass is closed and therefore remains full of air preventing this space from being filled with liquid.

The marc collects on the surface and forms the cap.

The air in the space below the diaphragm is rapidly displaced by the carbon dioxide being produced by the fermentation process.

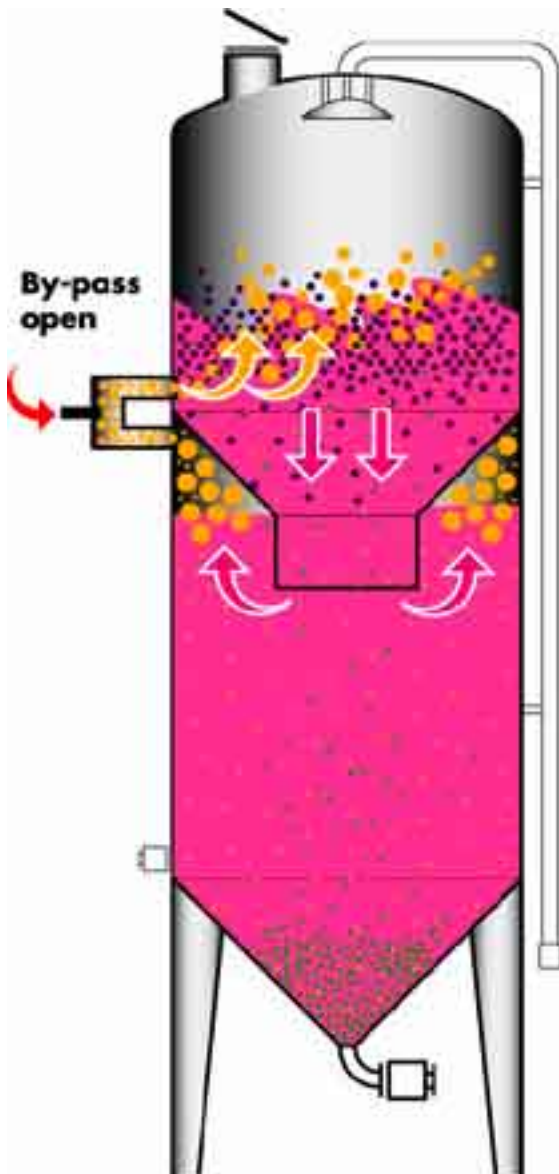
Once the space is saturated with carbon dioxide the excess gas under pressure rises in big bubbles to the surface through the neck of the diaphragm.

These bubbles constantly agitate the mass of marc and keep all the skins wet and evenly dispersed.

The mixing action causes most of the pips to sink to the bottom of the fermenter.

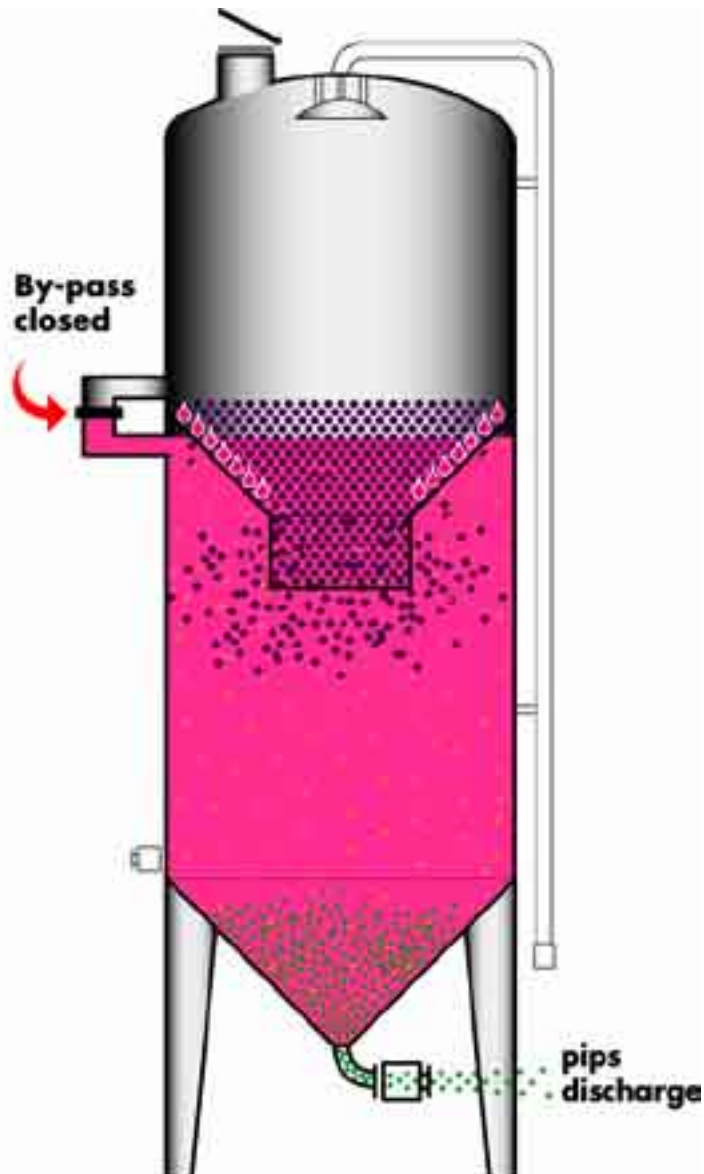
3

Opening the by-pass.



4

Délestage.

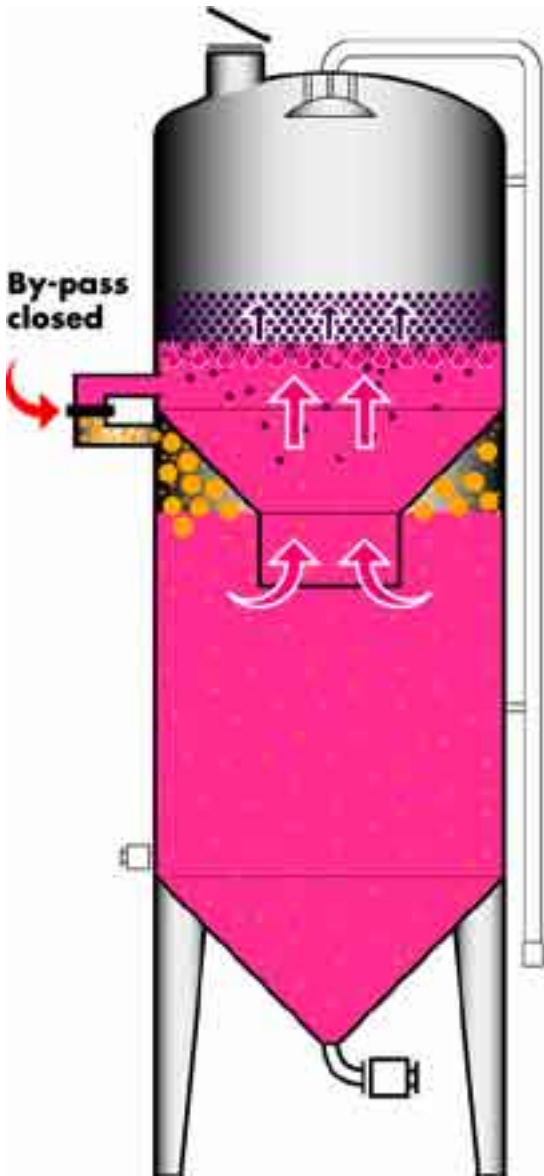


When the by-pass valve is opened the large volume of gas trapped below the diaphragm is released into the top chamber containing the cap. This causes the cap to be flooded with must and a vigorous mixing action to take place. This process is gentle enough to prevent any aggressive action on the cap but results in the cap being completely broken up. This is not a violent mechanical action and therefore the potential for producing an undesirable amount of lees is minimised.

After opening the by-pass valve and releasing the gas trapped below the diaphragm the level in the fermenter drops rapidly flooding the space below the diaphragm. The cap which is full of liquid is now spread over the large top surface area of the diaphragm. This results in the liquid being released from the marc gently draining downwards. This procedure enables the essential phase of delestage (rack and return) to take place with no mechanical pump over mechanisms involved. Large volumes of pips can be removed by opening the bottom outlet valve.

5

Leaching and static dripping.



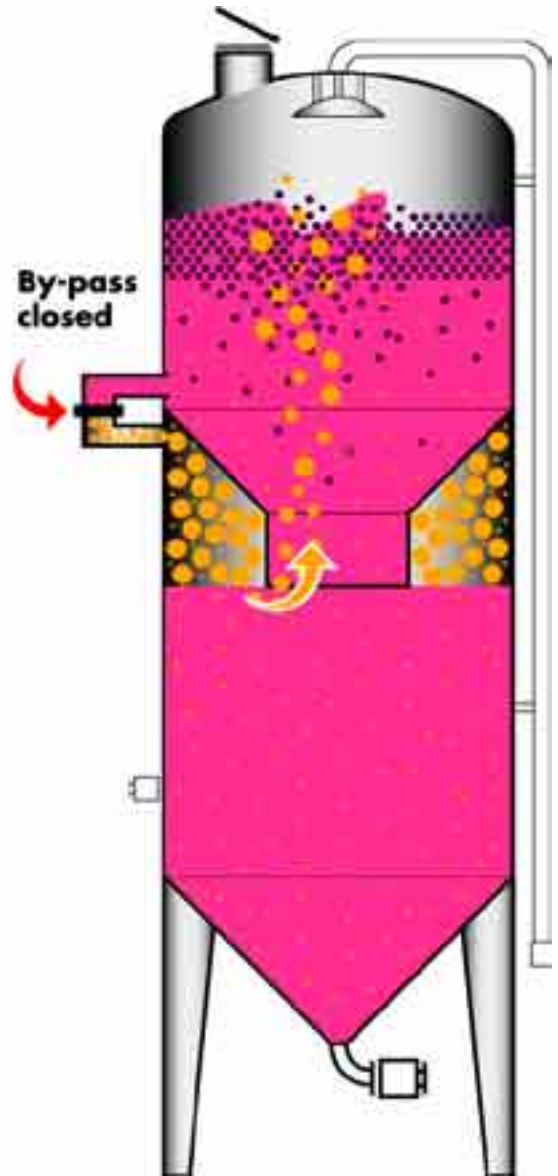
When the by-pass valve is closed again the carbon dioxide produced by the fermentation process starts to fill the space below the diaphragm again.

The level of the marc begins to rise again pushing the marc upwards resulting in further liquid to be released from the marc.

This new process results in further substances to be leached from the marc.

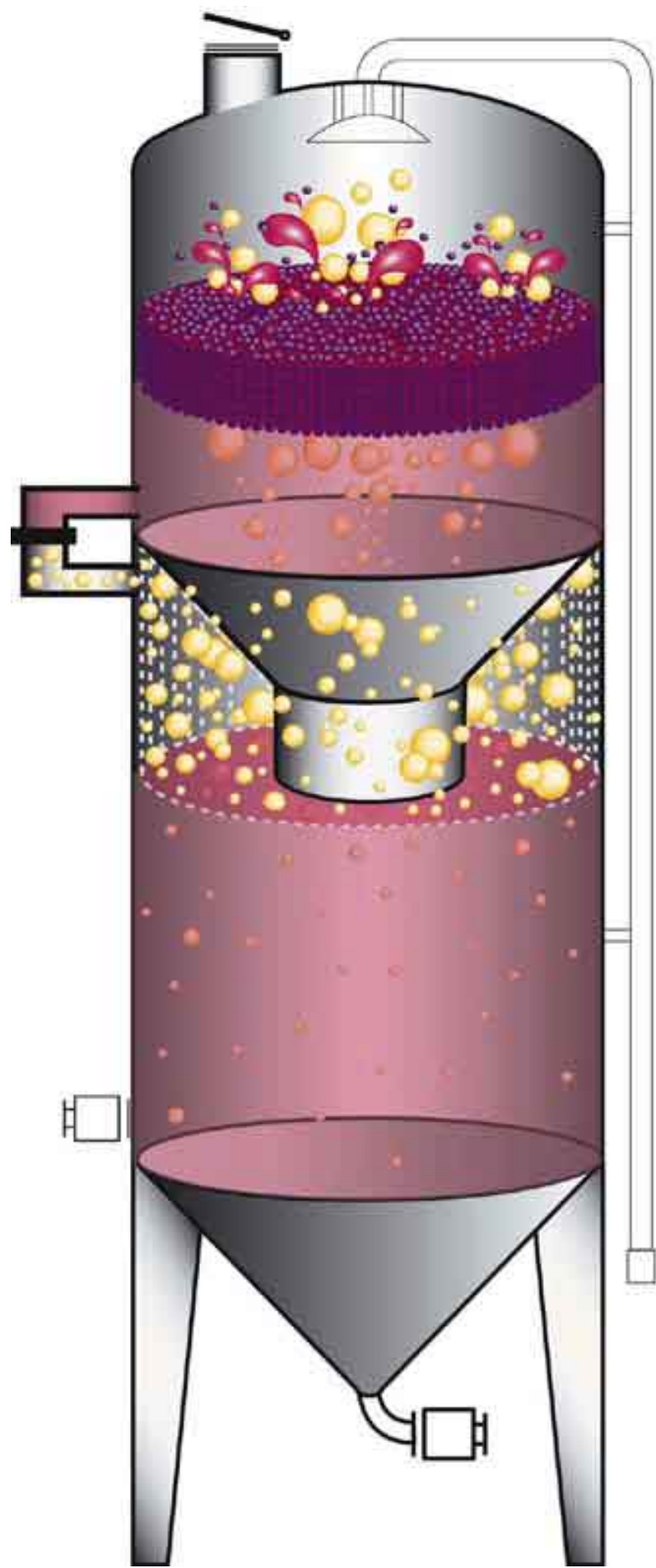
6

A new cycle.



As the fermentation gases begin to fill the space below the diaphragm the level starts to rise through the neck of the diaphragm. Once the space below the diaphragm has filled with gas the by-pass valve can be opened again and the whole process repeated at any preselected time.

The whole process can be repeated even when no fermentation is taking place by addition of carbon dioxide or oxygen below the diaphragm from an external source.



metodo  Ganimede®

metodo  **Ganimede**[®]

metodo 

Ganimede[®]:
*far more than a simple
fermenter.*

The following thirty pages are a basic attempt to explain what is made immediately clear on tasting a wine produced with **Metodo Ganimede**[®] technology: it simply tastes better...

So, it is not simply a new fermenter, but a new method of making wine, adding superior character to the end product.

The revolutionary idea at the heart of this system, is the delicate selective extraction of only the noble elements from the grapes, which, thanks to its surprising performance, has earned the label of **Metodo Ganimede**[®].



Ganimede®

Metodo Ganimede®:
we trust innovation.

Since the system was first developed in 1997 by the Friulian oenologist Francesco Marin, numerous oenologists and winemakers in Italy and around the world have decided to trust and invest in this innovative system. Some of them have quickly decided to produce “pure” wines, i.e. wines processed exclusively in **Ganimede®** fermenters.

It is possible today to compare Ganimede® wines with the products from traditional winemaking techniques. The results are amazing: strength, utmost elegance, balance and great softness are the characters that make Ganimede® wines unmistakable.

Metodo Ganimede®
*has become a brand
synonymous for quality.*

“Tommasi Viticoltori” from Valpolicella – famed for their superb Amarone – and “Azienda Agricola Vicentini Orgnani” – located in the impressive hilly landscape of Valeriano (PN) in Friuli revered for their refined Merlot – are among the first wineries which started producing wines exclusively with **Metodo Ganimede®**

At Vinitaly 2002 in Verona, they presented the “Metodo Ganimede®” label, which will be applied to the bottles of all wines made with this method to validate them and inform the end consumer about the specific characters of this innovative system.

The winemakers who have placed their trust in **Ganimede®** show great enthusiasm in the method. A remarkable example comes from “Azienda Agricola Venturelli” from Valeggio sul Mincio (VR): they soon joined the initiative with a very interesting “Bianco di Custoza” produced with **Metodo Ganimede®**, which confirms the efficiency of this method in the making of white wines as well as reds.

Any producer meeting the requirements set in the protocol available on the website www.ganimede.com, which regulates the correct use of **Metodo Ganimede®** label, can join this small revolution in the world of wine.

Ganimede®: simply revolutionary

metodo



Ganimede®:
Nature works for you!

The great innovation of **Ganimede®** relies on the ancient tradition of tapping the resources that Nature offers to man and his passions.

Ganimede® stands out for its revolutionary simplicity: no electricity, mechanical devices or pumping-over systems are required, and still, high quality products are obtained through an elementary process.

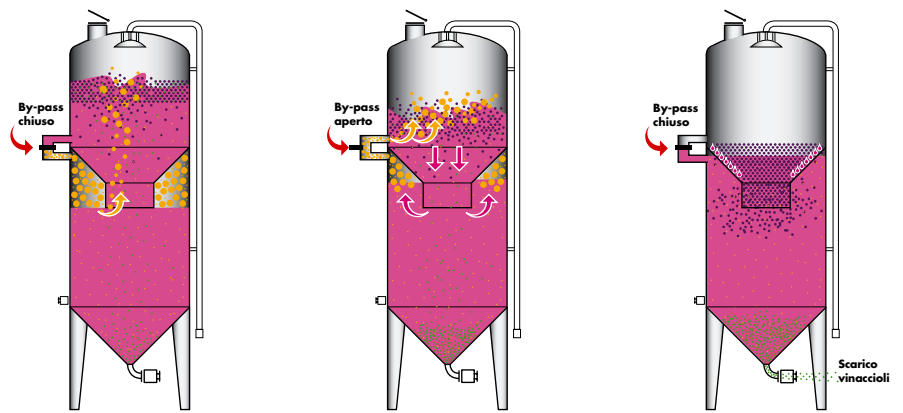
All the energy needed to mix marc during fermentation, **Ganimede®** taps from Nature. If you consider that 40 to 50 litres of carbon dioxide per litre of must are produced during fermentation, then approximately 4 million litres of gas are likely to be made available in a 800-hl (80 ton) fermenter!

Why leave such a valuable energy source be dispersed and not use it to our profit?

The funnelled diaphragm within Ganimede® is the key revolutionary element in the system, where this huge energy potential can be trapped. The diaphragm forms a space where the gas released during fermentation can be stored and then used to mix the whole mass of marc thoroughly and whenever it is needed. This way the whole process can be adapted to different needs.

Ganimede®:
cost effective and efficient.

The main scope of any fermenter is to extract the best from the fermenting marc, while preventing the cap from hardening, and to ensure a thorough and selective extraction of colouring substances and phenols, while preventing a too violent mechanical action on the cap which would produce an undesirable amount of lees, and which can contribute herbaceous aromas and bitter, astringent flavours to the fermenting must.



Ganimede®

All the systems currently available in the market need complicated mechanical and electrical devices, which are expensive and not always efficient, to obtain what **Ganimede®** achieves in a cost effective and efficient way by using delicate and natural technology.

Ganimede®:
*“delestage” made easy
 and successful*

Once the space below the **Ganimede®** diaphragm is full, the excess carbon dioxide rises to the surface through the neck of the diaphragm forming large bubbles. These bubbles constantly move the mass of marc and prevent it from forming a thick hard cap on the surface. Whenever a more vigorous action is needed, it is possible to open the bypass between the space below the diaphragm and the top chamber: this allows a large amount of carbon dioxide to escape into the chamber thereby thoroughly mixing the cap.

The cap, which looks well separated and full of liquid because of the stirring action of the carbon dioxide, suddenly lowers when the space below the diaphragm is flooded, and it evenly covers the conical wall of the inner diaphragm, where it is left to drain and surrender the substances previously extracted. This way, whenever the bypass is opened, Ganimede® repeats this highly revered method of “delestage” (rack-and-return).

Once the bypass is closed, the space below the diaphragm starts to fill up with carbon dioxide again and the marc is pushed upwards to the surface resulting in a static draining of the cap.

**A ready-at-hand
 revolution**

So, **Ganimede®** entails no mechanical action from pumping over, which causes the risk of excessive oxygenation of the marc and mechanical breakdown, and no mechanical action on the cap, which is aggressive on the marc and may result in the generation of an undesirable amount of lees. **The key to this Third Millennium revolution in the winemaking sector basically lies on an efficient, simple, low cost, natural and user-friendly technology.**

Ganimede®: the oenologist's best friend. Flexibility and selective extraction.

Greatest flexibility

Ganimede® offers amazing quality results beyond any expectations, even when unfavourable conditions intervene and control of each processing step is critical.

With red grapes, depending on their specific phenol content, different winemaking techniques must be adopted.

For example, for a Pinot Noir, where anthocyanins are moderate and tannins high, the "reduction" technique and a modest, soft use of cap management would be preferred. With Merlot and Cabernet Sauvignon grapes, characterised by a high content in both anthocyanins and tannins, oxygenation may interestingly result in higher polymerised tannins and therefore give softer and more luscious wines.

In this context, the performance of Ganimede® highlights the great flexibility of this innovative system, which allows the oenologist to adapt and choose the most appropriate operating cycle, depending on available grapes and on the wines to be made.

SELECTIVE, soft, simple and successful extraction.

Tasting and chemical analysis confirm that, by its own structural characteristics, **Metodo Ganimede® can help produce soft and velvety wines from the start.** In fact, problems that arise during the later stages of refining, when wines must be adapted to the needs of the ever more demanding consumer, are solved at their source.

This is as a result of a delicate and SELECTIVE extraction, whereby only the good substances are drawn off from each single grape in the marc (i.e. from 100% of the grapes).

Depending on the quality of the grapes and the pre-selected cycle of maceration and fermentation, **Ganimede®** produces richly coloured and fragrant wines, whose phenol content, though high, always confers a pleasant softness to the wine.

Ganimede®: innofermenterion combined with tradition.

Délestage made easy and successful.

Ganimede®: a professional and flexible tool.

Ganimede® is a true friend to the oenologist, offering the ability to tailor the whole winemaking process depending on the quality of the grapes being processed, the geographical area and the needs of the winery. Several simple and efficient alternatives for operation are made available: pre-fermentative maceration, maceration and fermentation in an oxygen-free habitat, fermentation with oxygen inoculation, post-fermentative maceration, removal of pips, stirring of marc-juice masses with the use of inert gases.

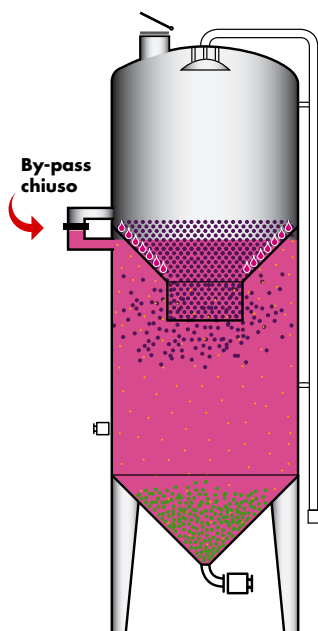
The DELESTAGE method.

With **Ganimede®** fermenters, a “delestage” effect is produced every time the bypass is opened. This method is highly praised because of the excellent exchange it causes between the marc and the juice.

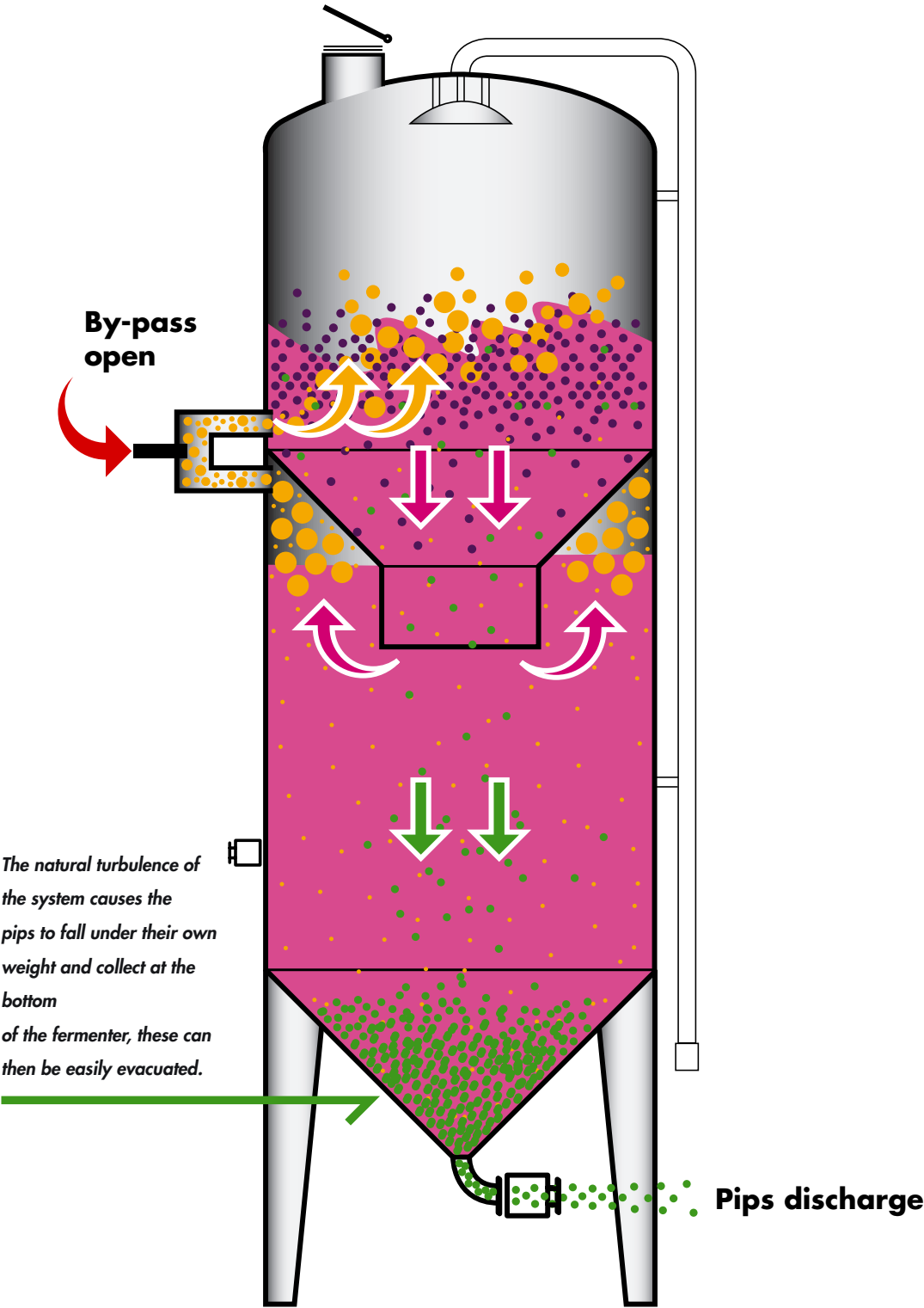
Due to the sudden decrease in level caused by the flooding of the gap after the bypass is opened, the marc is no longer stirred by gas and liquid and it gathers on the walls of the diaphragm, where it drains and surrenders the substances previously extracted into the juice.

As opposed to traditional systems, no drainage of the fermenter is needed, which is an expensive operation in terms of time and manpower and can give rise to an uncontrolled over-oxygenation of the mass.

Whenever a greater effect is needed, especially for longer periods of maceration, **Ganimede®** offers the option to drain the juice in part only and cause the marc to drop below the diaphragm. Then, by top filling the juice, the level rises again and the mass of marc is forced through the neck of the diaphragm in small quantities, which are then easily wetted by the juice entering from the top.



Ganimede®: the importance of flexibility.





Removal of pips



Pips are removed in large volumes

Removal of pips from the process

Thanks to its thorough and delicate stirring of the marc, **Ganimede**® causes most of the pips to sink to the bottom of the fermenter where they can be easily removed at any time by opening the total discharge valve.

In less favourable years, most tannins in the pips are lowly polymerised and highly reactive. These tannins make poorer wines and it is therefore useful to discard them.

Only Ganimede® allows the pips to be removed in total or in part and, as a consequence, the tannins in them.

In this way, excellent wines are obtained with tannins and anthocyanins from the skins only, which are easily extracted since the skins are not pressed.

However, should the oenologist require it, a simple gas injection at the bottom of the fermenter will bring the pips back to the surface. This results in a large contact surface area being made available and the solvent action of alcohol dissolves the lipid substances on the surface of the pips, assisting in the extraction of tannins from the pips.

Temperature control.

Ganimede® controls the pre-selected temperature of the whole volume of the fermenter in a faster and more efficient way via the high performance heat-exchange jackets fitted to the external surfaces of the fermenter.

Temperature control, with both heating and cooling options, allows the oenologist to pre-set all possible variables and adapt the processing method to the best available techniques, so as to achieve optimal results from of each batch of grapes.

The benefits of a simple and clean method

Since the marc is perfectly blended in **Ganimede® fermenters, undesired bacteria are prevented from proliferating and the typical acetic character of conventional fermenters is avoided.**

This highlights that a simple and clean process can offer exceptional results at every stage of the process.

Control tests invariably confirm that volatile acids are very low in the wines produced in **Ganimede®** fermenters.

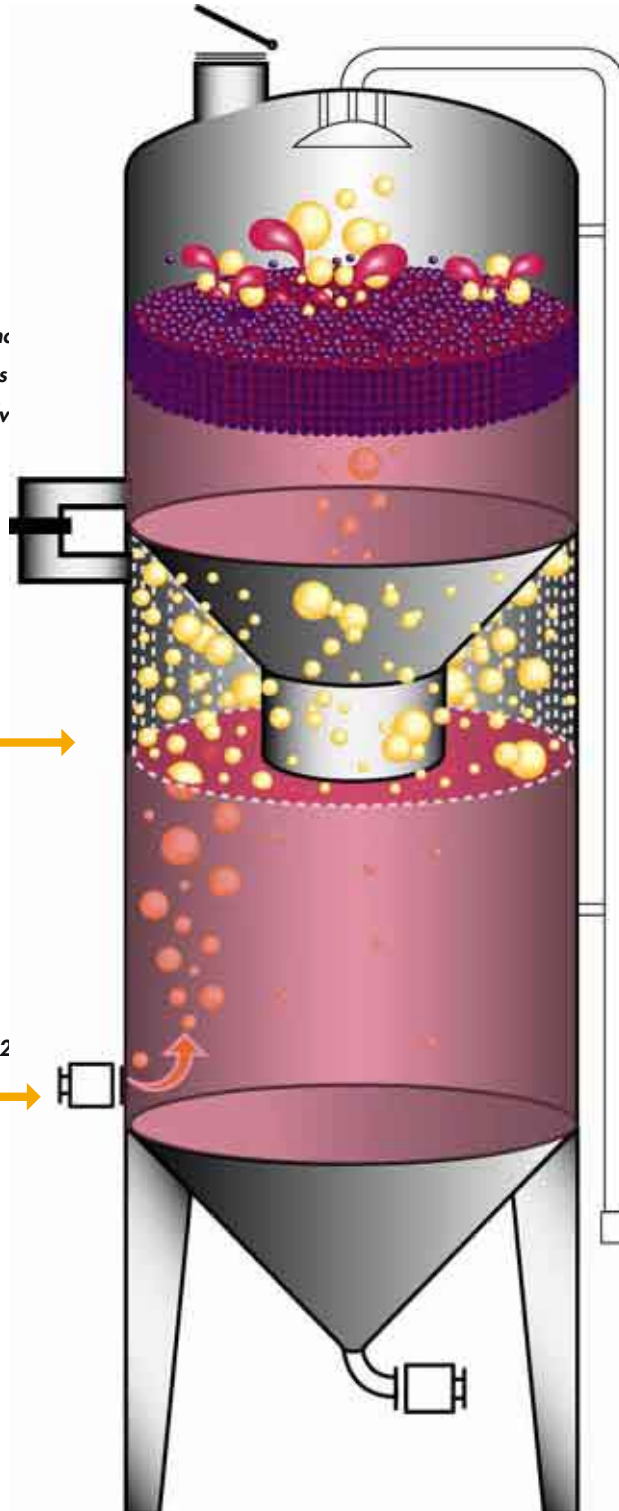
This has enabled oenologists to reduce SO₂ dosages in fermentation, with remarkable benefits as far as health is concerned, meeting WHO recommended standards for food and beverages.

Ganimede®: quality at full gas.
Gas inlet valve.

The pre-selected gas is injected through a valve and remains below the diaphragm with no chance to get out, as long as it is necessary for it to dissolve completely in the juice



*External gas inlet
(O2, filtered air, CO2, N2)*



Gas inlet valve.

A valve to admit gas from an external source directly into the gap below the diaphragm **can be used by the oenologist to tap the potential of Ganimede® at any time and under his direct control, and therefore obtain the desired results.**

Maceration before and after fermentation.

An innovative and exclusive option offered by **Ganimede® is to obtain, directly after crushing, a high degree of anthocyanin and aroma extraction through a simple pre-set addition of external gases into the space below the diaphragm.**

By using this technique it is possible to create **a stirring and blending action in the whole mass of marc, which is a unique feature of the Ganimede® system.**

When carbon dioxide levels drop off at the end of fermentation, or in the absence of fermentation, carbon dioxide can be added from an external source in a soft and efficient way without resorting to pumps.

This speeds up and enhances colour extraction without the presence of alcohol.

Some winemakers value this method highly as it enables the two phases of maceration and fermentation to be easily separated.

These results cannot be achieved with conventional fermenters, which make use of pump-over systems, and one must wait for the solid marc to separate from the liquid juice before starting operation, due to the fact that an excessive mechanical action on the skins at this critical time will result in the possibility of a serious loss of quality.

When the maceration period is very long, the addition of external gases into the space below the diaphragm also guarantees an ideal mixing of the mass post-fermentation.

*External gas inlet
(O₂, filtered air, CO₂, N₂)*

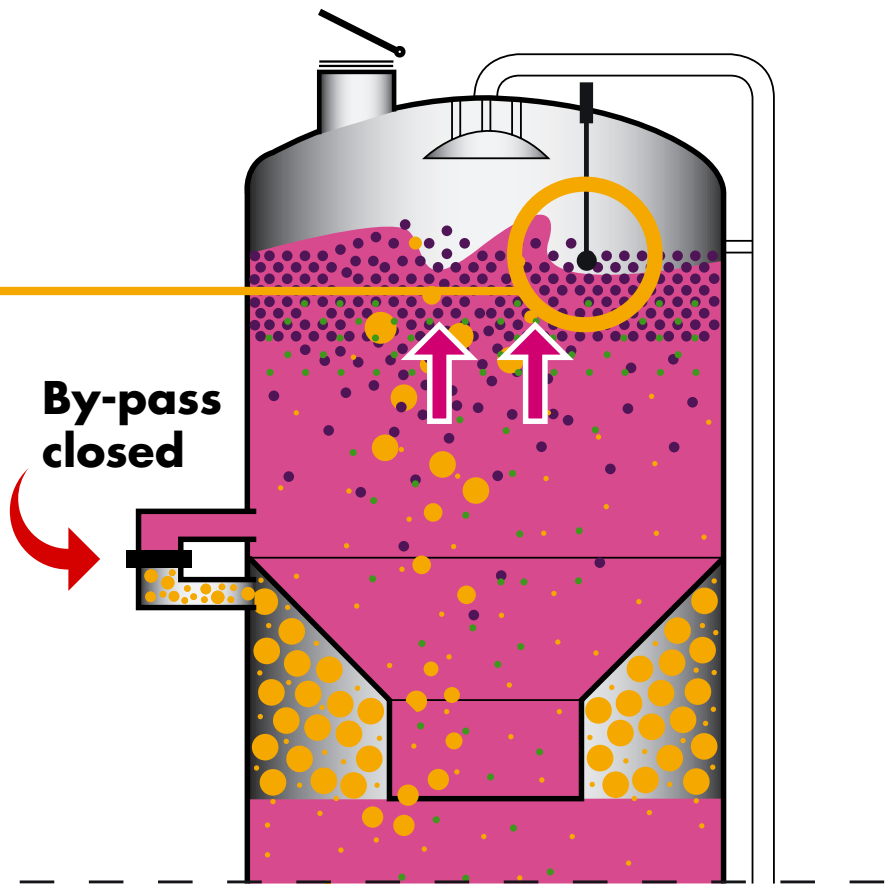
The oenologist can use the inlet valve to add other gases (for instance, filtered air or O₂) directly into the **Ganimede®.**

This is the only way to make sure that these gases remain – for the time required and in the volume chosen – in direct contact with the product, dissolving gently and setting a firm bond with it, without being dispersed into the atmosphere.

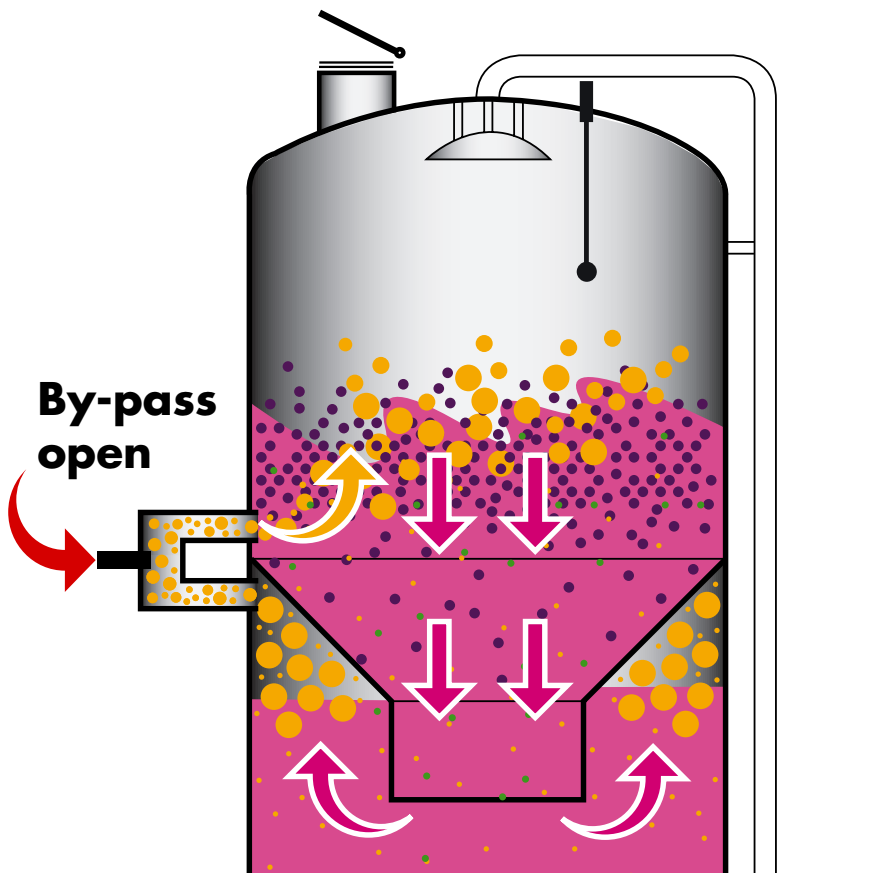
In traditional winemaking, the pumping-over method causes an uncontrolled and uneven oxygenation of the mass.

In contrast, **a controlled inoculation with oxygen can give interesting results in helping tannin polymerisation and therefore making the wines softer and more gentle on the palate.**

If the level of the juice suddenly rises, the Top Level device is activated and initiates the opening of the bypass, so that the liquid is prevented from overflowing the top of the fermenter.



When the bypass is opened, the space below the diaphragm is flooded and the level lowers by over 1m. This action guarantees an excellent safety margin, while not reducing the real capacity of the fermenter.



Ganimede®: quality under control

TopLevel Security System.
Multipurpose Digital Board.

Top Level Security System

Ganimede® fermenters are provided with a **Top Level probe**, which instantly opens the bypass and immediately lowers the level by 1 meter whenever the marc rises above the pre-selected level.

By employing this system the filling capacity of the tank can be exploited to the full.

In conventional fermenters, to avoid an undesirable overflowing of must and marc, it is necessary to sacrifice a part of the actual capacity of the tank.

In other words, the operational capacity of the fermenter is reduced to guarantee that the level is kept under control.

Thanks to its **Top Level probe**, **Ganimede®** guarantees **100% filling capacity**, preventing an undesirable overflowing and the consequential need to clean the tank - a difficult operation since time and manpower are often lacking at harvest time.

Multipurpose Digital Board

All the main functions of **Ganimede®** system can be set easily and precisely through a **Multipurpose Digital Board** hosting a new digital micro-controller (with a PC-connection RS-485 serial port, for monitoring and commanding purposes).

This unit enhances the great versatility of Ganimede® system, since all phases are automated and can be set at the oenologist's will to command temperature control, the opening cycles of the bypass, the actifermentation of the security probe and the timed inlet of two different gases (filtered air, CO₂, N₂).

Dedicated software enables the oenologist to customise the management of each single fermenter, with a daily resetting of the required operating parameters.

In addition to this, the Multipurpose Digital Board can send messages to pre-set telephone numbers (which may be changed) to warn of a possible abnormal operation of the system.

Ganimede®: flexible to the very end. Draining, cleaning and storage.

Ganimede®:
all “free-run juice”.

When the ideal time for drawing-off has come, the **Ganimede®** fermenter can be emptied.

In the basic conical-bottomed version, the marc can be drawn directly into the press by means of a **Rotho®** peristaltic pump.

Since the skins are well separated, the marc can be efficiently pumped into the press along 80 to 120 mm-wide diameter flexible pipes. This way, all free-run juice is obtained.

In conventional fermenters, where mechanical extractors, screws and hopper pumps are used, the strong mechanical action on the marc makes a lower quality wine (2nd pressing wine) in terms of chemical content and flavour characteristics.

The emptying operation of the **Ganimede®** takes place in a closed system, and is easy, practical, clean and functional.

Only one operator is needed to monitor this stage. At this stage there is also no loss of aroma or volatiles, caused by excessive aeration as experienced in conventional fermenters.

SLUICE POINT draining device.

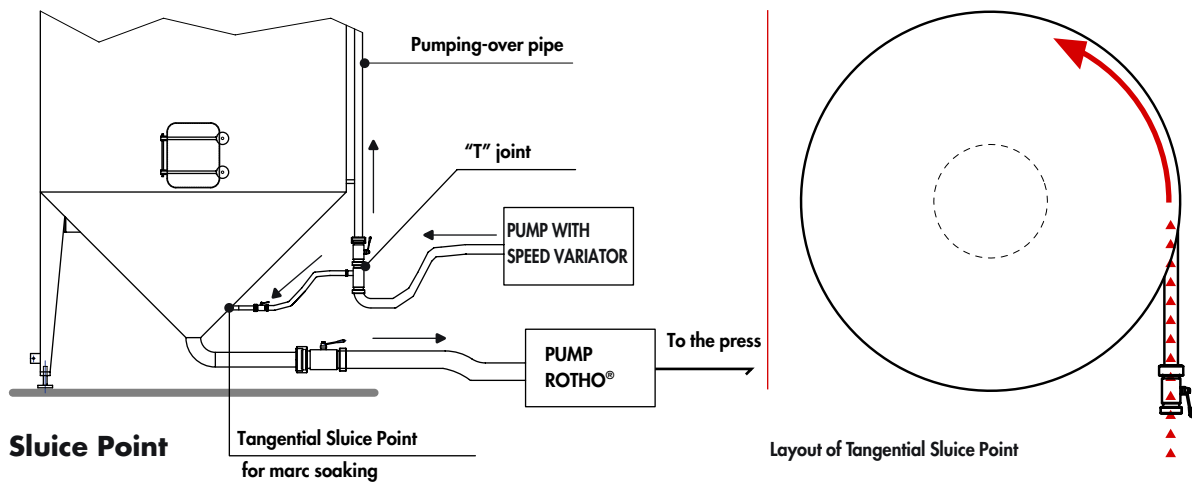
To ease and speed up this operation, **Ganimede®** high-capacity fermenters are provided with a **Sluice Point, a draining device for the tangential inlet for returning juice, which assists the marc to be pumped out of the conical bottom of the fermenter.**

Ganimede®: tailored to your requirements.

Ganimede® fermenters all have an internal funnelled diaphragm and a bypass system.

Further equipment originates from the will to enhance the potential of this revolutionary system and at the same time meet the technical needs and requirements of any oenologist.

It is therefore possible to adapt **Ganimede®** fermenters to conventional emptying systems, with adequate bottoms and equipments.



Some possible options for fermenter bottoms are:
 CONE, CONE WITH A SCRAPER DEVICE, CONE WITH A MECHANICAL EXTRACTOR, 3° SLOPING BOTTOM, 25° SLOPING BOTTOM, SELF-EMPTYING CONE, etc...

Cleaning.

The cleaning of **Ganimede®** fermenters is an easy and efficient operation, since there are no screens or other mechanisms inside.

Storage.

The structural simplicity of **Ganimede®** means that the fermenter needs no further alterations to be used as a very effective storage tank when not being used for fermentation. The tank can be filled completely, right up into the neck of the top man way thereby minimising the gas requirements for blanketing purposes.

This is achieved by letting gas in through a valve directly below the diaphragm, after the bypass has been closed. The liquid rises until it gets to the top man way and the remaining volume in the neck of the man way is filled with inert gas, and any contact of wine with air is then efficiently avoided.

Cone Bottom with Sluice Point device

Self-emptying Cone Bottom

Sloping Bottom



Ganimede®: Good wine also from big vats.

Fermenters from 35 to 2,000 hectolitres!

Ganimede® cone fermenters – the BIG range.

Model	Storage	Winemaking Process	Diameter	Shell Height	Total Height
GC 75	750	650	3.150	9.000	11.800
GC 90	930	800	3.550	8.750	11.800
GC 120	1.210	1.050	3.800	10.000	13.400
GC 140	1.390	1.200	4.250	9.000	12.500
GC 160	1.600	1.400	4.250	10.500	14.000
GC 175	1.750	1.550	4.250	11.500	14.800
GC 200	2.000	1.750	4.450	12.000	15.500

Ganimede®: BIG & SMALL.

The excellent performances of the **Ganimede® Small** series of fermenters (35 to 600 hectolitres) have also now been widely confirmed in the Big range (600 to 2,500 hectolitre with two or three bypasses).

Unlike conventional systems, **the size of Ganimede® fermenters does not affect the quality of the end product. Amazing results can therefore be obtained with a 1.800 hl volume fermenter, instead of three 600 hl volume conventional fermenters.**

In fact, the revolutionary system of **Ganimede® produces an upstream flow of liquid and gases, which can stir thoroughly and efficiently 100% of the huge volume of marc, up to 2.5 metres in thickness, for 100% of grapes. In conventional fermenters, on the contrary, 25 to 50% of the marc is under-utilised, since grapes are pressed together and cannot be fully extracted.**

Low cost and money-saving.

Ganimede® technology brings a revolution in the design of fermenters: because of the excellent cap management they prevent a thick cap from forming - a major disadvantage of conventional systems. It is now no longer necessary to build low and very wide fermenters, which are expensive, take up a lot of space and have limited capacity.

Ganimede® fermenters are less restrictive and therefore a lower number of fermenters make up the overall capacity requirements. The quality of wines produced in large volumes is higher than in conventional systems and less manpower is needed.

Ganimede® fermenters need virtually no maintenance and can be installed outdoors as there are no mechanical parts that need to be protected from exposure to the environmental elements.

The **Sluice Point** device mounted in the cone results in a less liquid being needed to drain the fermenter, so that the whole discharge operation is easier and faster.

Ganimede®... the making of white wines.

metodo



Ganimede®:
not only red wines...

Ganimede® now has much more to offer, its great versatility makes it stand out in the production of white wines as well, and the system has already proven successful in the “maceration” of white grapes.

*Pre-fermentative maceration
of white grapes (skin contact
method)*

Ganimede® offers the option to saturate the fermenter with CO2 before starting to fill it, so that the must is totally protected from oxygen.

The gas can remain beneath the funnelled diaphragm and, pressed by the liquid pushing from below, perform a useful action by partly dissolving in the liquid itself and acting as a solvent agent. When the gap gets saturated, the gas rises through the diaphragm neck and forms big bubbles that gently stir and blend the juice and the skins together.

This technique is particularly effective in producing white wines with more prominent and elegant aromas (particularly sensitive to oxygen), which are more structured though not hard, bitter or herbaceous.

Through this method, **Ganimede®** provides less acidic musts, enhances the aromatic potential of wines and raises the wines content in total polysaccharides.

Some producers successfully and rewardingly use this opportunity made available by **Ganimede®** to apply the skins contact method on white grapes where cold maceration is relatively short (4 to 24 hours).

This highlights the considerable value of an even though soft stirring action, which is totally different from the common practice of static maceration. The whole extraction process is faster, with highly beneficial results.

Ganimede®

As stated above, such results cannot be achieved, for instance, with pump-over fermenters, where the marc is not separated from the juice at the initial stage.

Therefore, early use of pumps can lead to possible blocking of the pump itself and to a strong mechanical action on the skins, causing serious quality impediments.

Fermentation of white must.

Ganimede® is also successfully used to ferment white musts with optimum efficiency, both in terms of hygiene and energy conservation.

Several of our customers remarked that, as compared to conventional tanks, fermentations in Ganimede® fermenters are more regular and efficient, with no delays or disruptions.

The wider surface offered by the funnelled diaphragm and the turbulence of CO₂ created by the system creates ideal conditions for the proliferation and action of the yeasts.

This fact is also substantiated by a lower content in acetaldehyde in the finished wines.

The flexibility of **Ganimede®** tanks enables them to be used for fermenting white musts prior to the fermentation of red grapes, which are usually harvested after the whites.

Maturation on the lees: (light lees contact)

Ganimede® is particularly suited to maturation on the lees (yeast autolysis), after the first racking.

The large surface area provided by the bottom of this fermenter, together with the large surface area of the diaphragm itself, offers the opportunity to tap the huge synergy of the system.

Bringing light lees to the surface to re-distribute the yeast thoroughly over the whole volume ("bâtonnage ") is an easy and efficient operation to perform with Ganimede® fermenters.

Ganimede® : : a passion for great wines.

"... with humbleness, as they who acknowledge their own limits and can find in research, experimentation and investments the key to growth and improvement. But also with love, as they who devote their own life to wine and will never accept to hear that it is only as a good source of earning and personal success..."

"With Ganimede® technology, based on distributing the marc, we manage to achieve even and delicate release of colouring matter and components extracted from the skins: simply a must when aiming at highly complex wines suitable for refinement in barriques."

GIANNI MASCIARELLI



"Ganimede®'s remarkable versatility makes a customised management of the whole process a reality, helping oenologists obtain wines with the desired qualities."

Romeo Taraborrelli, oenologist



Ganimede® and Amarone: a challenge about quality. Four winemakers from Valpolicella compared.

***Amarone: a great wine
has ancient roots.***

The origin of this wine is lost in time. Plinius the Old mentioned it and Cassiodorus described it this way: "keeping the grapes until December, pressing them softly in deep winter and store the must without boiling it, leaving it to rest for a long time before handling it, or drinking it".

Nowadays, the Corvina, Rondinella and Molinara grape varieties are cultivated in the area of Valpolicella, around Verona. These grapes are used to make Amarone. They are harvested around September-October and left to dry until January-February, by which time they have lost about 40% of their water content and have high residual concentrations of sugar and substances.

Why Amarone?

This great wine was chosen to test Ganimede® fermenters because it is an extreme case in the making of red wines, as the marc forms a very thick cap (up to 250 cm).

Ganimede® fermenters have confirmed their efficiency in mixing the marc evenly.

This way, the cap is well separated and all the skins are thoroughly soaked with liquid.

Even with these extremely difficult conditions, Ganimede® can guarantee optimum selective extraction of substances and produce great wines for ageing.

In traditional winemaking methods, especially in large-sized fermenters, the marc is not blended thoroughly, since the must flows in preferential channels within the cap and most of the marc is left out of the fermentation and extraction process.



**“Azienda Agricola Musella”
(San Martino Buon Albergo, Verona) Italy**

“**Ganimede**® offers higher depth in colour, a remarkable fruit, a full and soft mouth feel thanks to fair amounts of extracted substances and highly polymerised phenols.”

Emilio Pasqua



**“Tommasi Viticoltori”
(Pedemonte, Verona) Italy**

“With **Ganimede**® we have obtained an exceptional Amarone that is richer in colour, very well structured, with complex, intense and persistent aromas.”

Dario Tommasi



**“Fratelli Bolla S.p.A.”
(Verona) Italy**

“We chose **Ganimede**® because extraction is delicate, selective and not aggressive and the skins remain intact.”

Elio Novello



**“Azienda Agricola Novaia”
(Verona) Italy**

“**Ganimede**® combines the versatility of use to the exceptional extractive capacity allowing the full respect of the fruit.

Gianpaolo Vaona

Ganimede® in Australia: lessons from the other world...

Ganimede®:
*from the world, the opinion
of wine experts..."*

Since **Ganimede®** was first developed in 1997, it has consolidated its reputation with wine experts from all over the world.

To fully understand the revolutionary philosophy lying at the heart of this system, let us consider some commentaries from other parts of the world:

*"The way the cap is kept under control is extraordinary for such a large fermenter, and the possibility to vary the action of the bypass enables the oenologist to have full control over colour extraction. A complete extraction from skins is easily obtained. The cooling system gave me excellent control over fermentation temperature, so that my job at harvest time was made far easier. Only one operator was needed to discharge the marc after a load of 80 tons in 1 hour and ten minutes. The integrated soaking of the marc eliminates the need to intervene manually with pressure nozzles at draining-off.. In brief, I feel the operation of **Ganimede®** fermenter is best described as "set and forget."*

**Stuart Auld, Senior Winemaker
Normans Lone Gum Winery - Australia**

*"The **Ganimede®** fermenters we have been testing for three years at Leconfield performed very well. Fermentations are consistent, clean, and exhibit extremely good aromatics, with good colour extraction."*

**Philippa Treadwell, Winemaker
The Hamilton Wine Group Coonawarra - Australia**

"...a wine with a high content in tannins is not synonymous for a long-living wine, but for an unbalanced wine."

Pierfranco Giovannini, oenologist

Cantine Endrizzi s.r.l. (TN)

metodo  Ganimede®

metodo 

Ganimede®:
*chemical analysis confirm
selective extraction.*

We think it is widely acknowledged that **a powerful extraction does not always result in better wines. It is only the noble elements that should be extracted.**

A high content of aggressive and harsh tannins forces the oenologist to make later corrections to the wines during their refining, when they are tailored for the market. Such corrections very often diminish the overall complexity of wines and entail higher costs and longer delays.

We can therefore state that having a wine where tannins are soft and less aggressive as soon as it is drawn off is a crucial condition to ultimately obtaining a great wine.

Tannins and polyphenols:
don't mind their number!

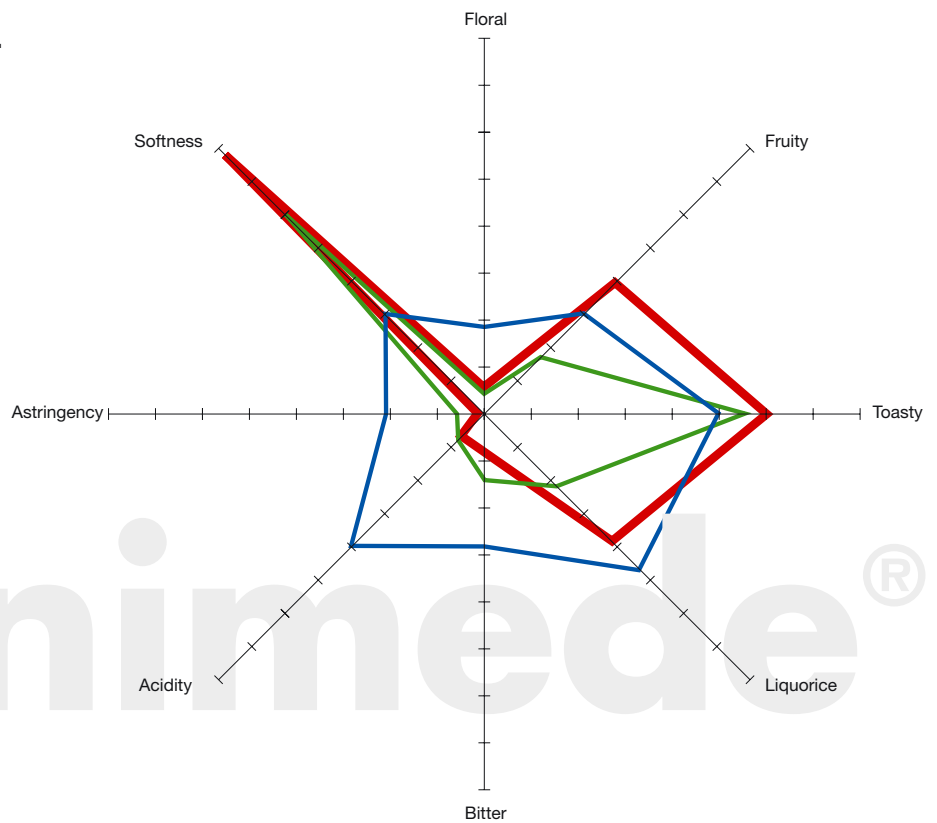
Oddly enough, if our only goal was to perform the extraction from grapes, we could simply whisk the product and obtain a considerable amount of extracted substances: on the contrary, to make a good wine we must use **a delicate method to select the noble elements only, the ones needed to make a wine appreciated by the consumer for the complexity and harmony of its characters.**

The chemical analysis on wines processed with **Metodo Ganimede®**, as compared to wines made with conventional systems, not only reveal a different QUANTITY of extracted elements – which is not necessarily an absolute value, as stated above – – **but above all a different QUALITY of substances and a good balance among them, giving a better end product.**

Sensory profile.

*Comparative test
on Barolo 1999.*

Ganimede®
Pumping-over Tank
Standing Fermenter



Ganimede®:
sensory analysis.

Sensory analysis is undoubtedly the most important and ultimate assessment of the quality of a wine: the end consumer, who is not aware of the winemaking technologies or of the chemical analysis performed on the wine he is tasting, rates a wine on the basis of the sensations he gets from it, namely: complexity, harmony and balance of its different components.

The success of **Metodo Ganimede®** is mainly linked to positive judgments about the **sensorial analysis of the quality of the wines produced with this system. As compared to other wines made with different methods, they stand out for their fine and elegant aromas and their soft mouth feel, guaranteed by their content of "soft tannins".**

Ganimede®:
tasting is the key to our success.

At SITEVI in Montpellier and at SIMEI in Milan in the year 2001, tasting sessions were held to judge wines from different winemaking areas and regions which had been processed with **Metodo Ganimede®** using grapes harvested the same year (wines which had not been aged yet, so that their true quality could be judged):

numerous experts who had the chance to taste for the first time such a vast range of wines produced with this method, were amazed and pleased by the impression of finesse and the softness of tannins in all the wines they tasted.

Metodo Ganimede® enables a selective, delicate and thorough extraction of colouring substances and phenols from the skins (optimum extraction efficiency) and **optimal separation between the tannins in the skins – which are rounder and fatter – and the tannins in the pips – which are often harsher and more astringent and, if necessary, can be easily excluded from the process.**

metodo Ganimede®

Ganimede®:
progress with Nature.

The greatest intuition of man in the path of evolution was to find the tools to reach his goals.

Nature offered these tools to the caring man who was eager to progress and make new conquests.

Today, Ganimede® is a precious tool tapping the huge energy potential of fermentation from Nature and making a better wine out of it, through a natural, economic, simple and amazingly efficient process.



