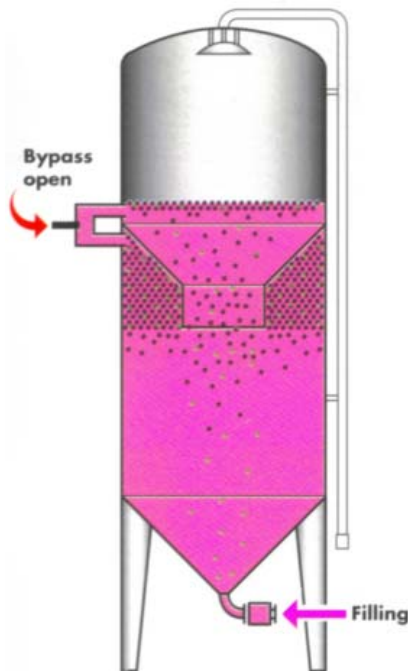


The **Ganimede**[®] process was developed in Italy and is widely used in Italy and France. It is gaining acceptance in the United States. In the **Ganimede**[®] system, an internal cone is built a little lower in the tank and is designed to be filled with must well above the top of the cone. It can be used in different ways. For gentle agitation of the cap, CO₂ gas is allowed to be trapped under the internal cone until it bubbles up through the bottom of the cone, gently rocking the cap as it does so. The trapped gas can also be released all at once; allowing the cap to fall into the neck of the cone, breaking it up and agitating it. Valves can be automatically reset and timed to repeat the process. Pips can be expelled through a central drain on the bottom of the tank.

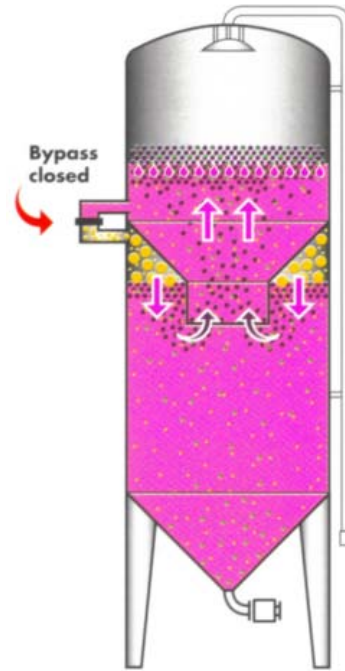
Ganimede[®]

- Cap is kept above the internal cone
- Trickle CO₂ to rock the cap continuously
- Agitate the cap more aggressively with a sudden release of CO₂
- Pip extraction

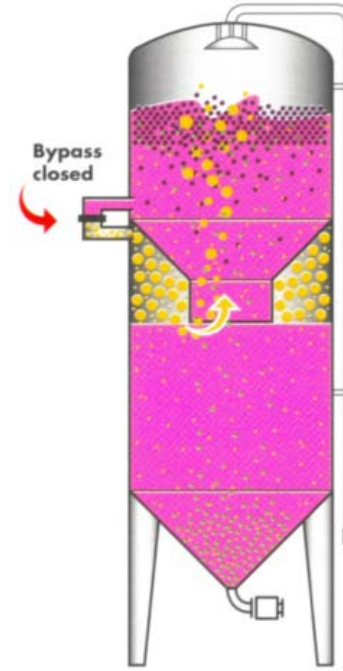
Ganimede[®] is a versatile system that can be configured many different ways for different uses. One popular configuration includes extra ports in the internal cone through which gas can be pumped for oxygenation of the must during early fermentation.



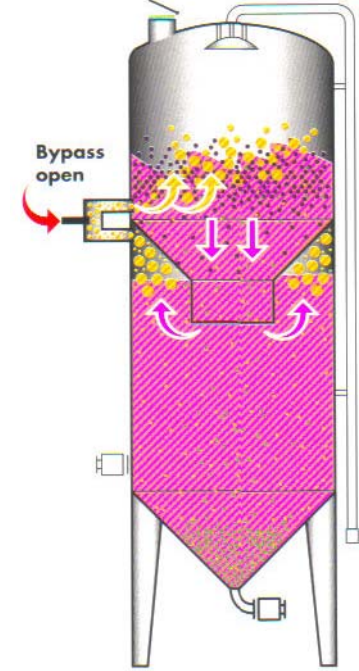
The tank is filled with must to a level above the top of the cone.



Pressure from CO₂ gas trapped below the internal cone forces must into upper chamber.



CO₂ trickling into upper chamber through the internal cone rolls the cap.



Gas pressure released through the bypass valve agitates the cap more vigorously.

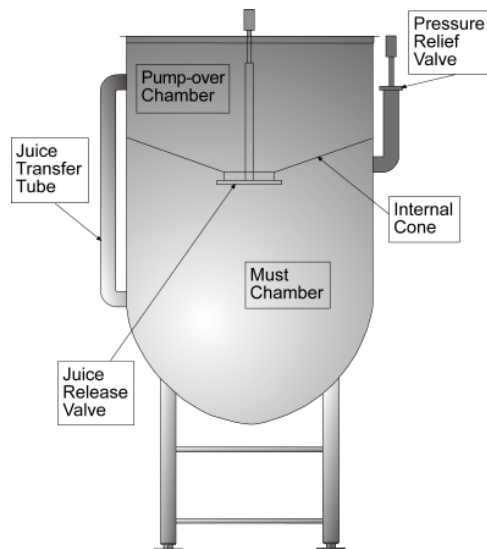
Natural Cap Management Systems

AAA Metal Fabrication manufactures two tank systems designed to naturally and automatically agitate the cap during fermentation. These systems are known as the **Ganimede**[®] and **Ducellier** systems and both work by using the force of trapped CO₂ gas. These cap management systems have the advantages of being gentle on the fruit and can be set up to operate automatically on a schedule. Both systems work perfectly to wet the cap, agitate the cap, enhance phenolic extraction and augment pip expulsion.

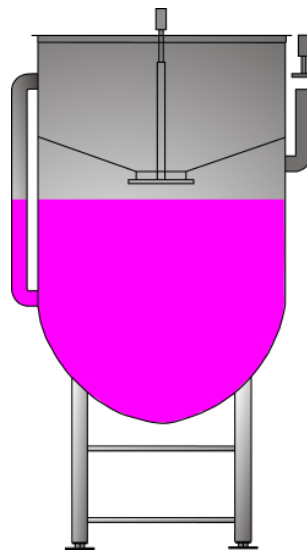
Ducellier

- Cap is kept below the internal cone
- System is tolerant of variable fill levels
- Automated pump-over
- Pip extraction

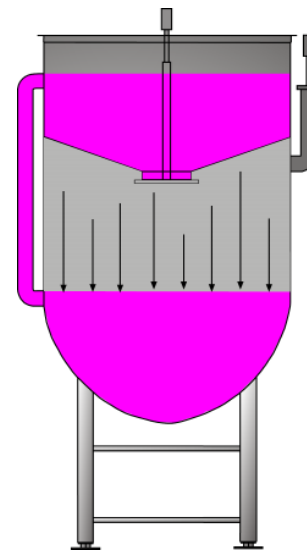
The **Ducellier** process is widely used in Portugal. In our version of the system, a tank is separated into two chambers by an internal cone. The tank is filled with must up to the bottom of the cone and then sealed. CO₂ gas from fermentation is trapped in the space between the top of the cap and the bottom of the cone. As pressure builds, it slowly forces juice from the bottom chamber up an external tube and into the top of the cone. When the cone is filled, a valve is released on the bottom of the cone and the juice floods back into the lower chamber, wetting and agitating the cap. The valves can be automatically reset so the process will repeat itself. A timer can be used to control how often the process is repeated. Pips can be expelled through a central drain on the bottom of the tank.



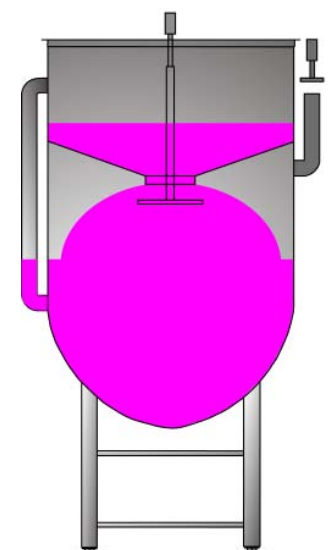
The **Ducellier** system is comprised of a tank with two chambers joined by a transfer tube.



After tank is filled with must, the pressure relief valve is closed and CO₂ gas from fermentation begins to accumulate.



Pressure from the trapped gas forces must into the upper chamber where it is held for timed release.



Releasing the valve on the internal cone floods the cap with juice.