



RAPIDASE FILTRATION

HIGH SPEED ENZYMES SINCE 1922

WINE FILTRATION: A KEY POINT DURING WINE PREPARATION

During the winemaking process, one of the key steps where the efficiency of the winery is challenged, and the quality may also be affected, is during must or wine filtration. The objective is to eliminate small particles in suspension (fragments of berry cell, yeast, mucilage, etc.) or colloids (polysaccharides, polyphenols and proteins, and their aggregates) responsible for turbidity. The two main filtration mechanisms are based on the flow direction: front filtration when the flow is perpendicular to the filtration barrier and tangential filtration when the flow runs in parallel to

the filtration barrier. One of the main issues of filtration remains clogging, which decreases filtration flow. This is time consuming and can even have detrimental effects on wine quality (oxidation for instance). To avoid it, several systems can be used in series, starting by filtering out large particles and then increasing the retention threshold. Different types of filters are available, depending on the step during which they are used; from press filters mainly for lees filtration, to tangential and cartridge filters for wines finishing and sterilisation before bottling.

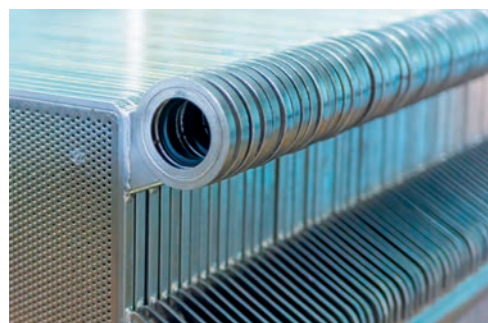
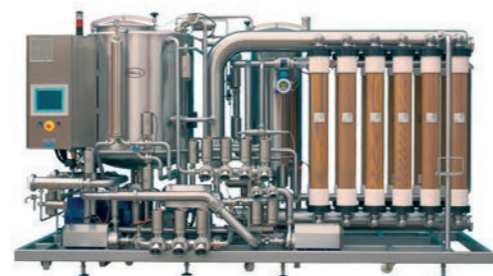


Figure 1. Tangential and cartridge filters.



To check the filterability of wine, different standardised indexes are broadly used in wineries: Clogging Index (C.I.) or Filterability Index (FI) and Vmax tests.

RAPIDASE® FILTRATION AN ENZYME TO FACILITATE AND SPEED UP FILTRATION

Rapidase® Filtration contains high polygalacturonase and α -N-arabinofuranosidase activity from *Aspergillus niger* and β -glucanase from *Talaromyces emersonii*, as well as secondary activities derived from standard microorganism metabolism and retained in the finished product. Activities allow the degradation of both simple and complex pectic polysaccharide chains, while β -glucanase activity leads to the degradation of any glucans, mainly from *Botrytis* contaminated grapes.

Rapidase Filtration is an efficient prevention or curative tool that increases FI and or Vmax, and is suitable to prepare wine for any type of filtration. In addition, good results were also observed either for the filtration of lees or to speed up and enhance clarification after fining. **Rapidase Filtration** has no effect on mannoproteins, preserving those qualitative compounds in wine.

RAPIDASE FILTRATION AND THE RED WINEMAKING PROCESS

