# FINING & FILTERING

What, When, Why and How

# Why Perform Fining ?

The two most common reasons for fining are:

- To remove haziness and make the wine clearer
- To reduce the amount of tannins in the wine

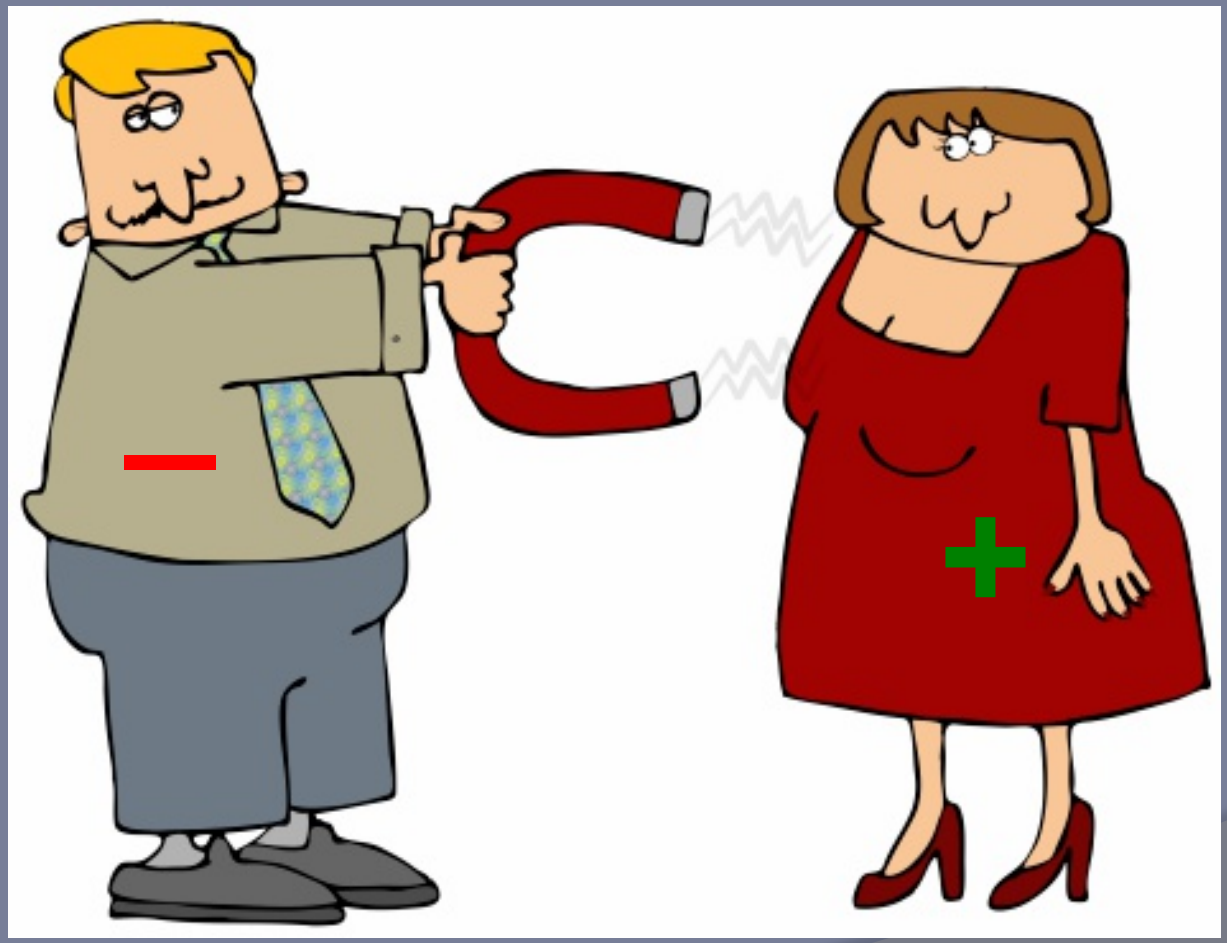
# What is Fining ?

- Most fining agents added to a wine work by attracting the positively or negatively charged particulate matter suspended in the wine, causing these particles to bind to the fining agent and precipitate to the bottom of the vessel for effective racking.

# Fining Agent Characteristics

| Positive Charge | Negative Charge | Neutral Charge |
|---|---|---|
| Egg Whites (Albumen) | Bentonite | PVPP |
| Gelatin | Kieselsol | |
| Chitosan | | |
| Isenglass | | |
| Sparkalloid | | |
| | | |

# Example of Fining (?)



# What is Filtering ?

Filtering is the mechanical removal of suspended particles, and elements like yeast or bacteria, left in the wine after fermentation and prior to bottling.

# Types of Filters

Simple Plate Filter

Inline Filter

Cartridge Filter

Multi-Plate Filter

# Why Filter ?

There are two reasons to filter wine: Aesthetic and Chemical.

- Aesthetic: Filtration can make a wine more polished, or clear.
- Chemical: To prevent spoilage, yeasts and bacteria left in the wine can be removed prior to bottling

# Aesthetic: Making the Wine Pretty

If the wine is not perfectly clear, and microbial stability is not a major concern, make the wine sparkle by Polish Filtering.

- Usually for white and rose' wines

# Chemical: Filtering to Save the Wine

If you have residual sugar or Malic acid left in the wine, or there is any suspicion of Acetobacter or Brettanomyces during the ageing/storage period, then filtration is no longer an aesthetic decision; it becomes the only way to guarantee microbial stability for the wine by Sterile Filtering.

# How Does Filtering Work ?

Pore sizes of filters are measured in microns. Typical winemaking sizes are 5, 3, 2, 1, and .45 micron media.

Filtration's guarantee of microbial stability comes from the fact that the pore size of filters can be made smaller than the actual yeast and microbes themselves. As the wine passes through the filter the larger microbes become stuck and are removed from the wine.

Note: .45 microns are needed for a sterile filtration.