

## **II.2.2.10 Treatment by continuous high pressure processes**

### **Definition:**

Operation for the elimination of wild microorganisms in musts by high pressure processing (above 200 MPa or 2000 bar) in continuous. In UHPH, the pressure is usually ranging 300-400 MPa.

### **Objectives:**

- To reduce or eliminate the load of wild microorganisms, mainly yeasts, preserving the organoleptic quality.
- To reduce the amount of SO<sub>2</sub> used in winemaking.
- To reduce or inactivate the activity of oxidative enzymes.
- To get grape must stable from the microbiological point of view.
- To obtain partially fermented musts.

### **Prescriptions:**

- a) The ultra high pressure homogenization technique (UHPH) consists in the application of pressures higher than 200 Mpa (2000 bar) by continuous pumping.
  - UHPH: continuous process that could be better integrated in the pretreatment of musts.
- b) To eliminate the yeasts of the musts, pressures of 200-400 Mpa are needed.
- c) To eliminate bacteria, pressures of 200-400 Mpa are needed.
- d) The treatment speed can range from 40 L / h to 40,000 L / h.
- e) If necessary, the increase in temperature can be controlled with additional refrigeration.
- f) Neither the increase in temperature nor the techniques used should produce significant alterations in the appearance, color, smell or taste of the wine.
- g) The procedures must conform to the specifications of the International Oenological Codex.

### **Recommendation of the OIV:**

Admitted