

Humidity Control System for Wine Maturation Structures

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Abstract. Fogging systems can be used to maintain the high humidity required in wine aging structures at acceptable levels during the day and as long as temperature inside the wine maturation store is rising. However, as soon as the temperature starts falling, fogging systems will fail to bring down the humidity resulting in condensation. Condensation is undesirable because apart from causing the development of mould on the barrels and sections of the structure it might even lead to structural failure. A device that controls the humidity and maintains it at set levels throughout the day was designed and constructed. The device could control the humidity and maintain it within set levels inside a standard storage container and at no time did condensation occur.