



Polar operating technique

The cryogenic refrigeration technology is quite complex, first of all to the difficulty due to the maneuverability of such gases, and then to the disruptive effect that the cold so high compared to the temperature of the product generates behavior variables as a function of the product itself.

The machines designed and made by us in collaboration with engineers of one of the largest distribution of these gases companies exploit the properties of some cryogenic gas, to have a very low temperature at ambient pressure, which permits, for contact, a sudden lowering of the temperature that blocks all degenerative processes developed during the periods of transport from farm to cellar the grapes, it provides the opportunity for operators to work in oxygen-free environment to prevent oxidation, and to organize a gradual fermentation and controlled as intended. Furthermore, the sudden drop promotes the breakage of the pectin or of catechins, depending on the type of grape, allowing the extraction of a wort rich of scents and aromas that enhance the work of the field and accentuate the diversity of the product exalting a striking the product you get.

GENERAL DESCRIPTION OF POLAR OF SYSTEM:

It allows to reduce the temperature of the grapes to the passage, ie, while the product to be processed is sent via pumps to the presses or to the storage tanks and fermentation, it is made to pass while maintaining a power of about 18000/20000 kg / h, through the RP03 , which setting certain parameters can lower the temperature almost instantly 15/20 ° C (compatibly with the feeding speed desired and the type of product to be cooled). Questa macchina innovativa può essere usata indifferentemente su tutti i tipi e le qualità delle uve o di prodotti che possono essere pompate al suo interno, i materiali di costruzione sono totalmente in acciaio inox AISI 304 (a richiesta AISI 316 con sovrapprezzo) o in materiali idonei al contatto con gli alimenti, ed è stata correttamente omologata per rispondere alle direttive comunitarie in materia di sicurezza sul lavoro.

Compared to other products that may be on the market to date, we can state that the principle of operation of our equipment is the only one able to allow a correct homogenization of the product to be cooled with the injected gas within the cooling chamber and which allows to maximize the cooling power developed by offering a proper saturation of the grapes without cause cold burns.

Exhaust gas discharge that causes the lowering of the temperature is modulated by a sophisticated control that allows to keep inside the machine only the pressure needed to product evacuation without additional pumps (up to a head of 3.5 in line bars) and hence without creating mechanical stress the grapes.

The study of the form of embodiment of the machine has been conceived in order to sanitize the internal part of same without problems and with reduced times. The convenient automatic washing system controlled by the electronic processor and practical portholes with a single handwheel allow the washing whenever you wish in about 5 minutes. The presence of numerous accessories and controls allows the machine to be inserted within the processing chain and check its procedures with practicality and safety of personnel.

