GRUPO VENTO

NEW EVAPORATION TECHNOLOGY FOR ALMOND INDUSTRY

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The evaporator produces water with excellent features for reuse in the process, generating a flow much higher than its own consumption needs.

PROCESS

Currently, the process of washing and blanching almonds, key stage for its high water consumption, produces water with high biological and thermal pollution (BOD, COD, SS, T approx. 90 ° C).
This water is difficult to treat by conventional purification systems (physicochemical purification of waste water), so it has been developed this minimization technique, based on multiple-effect evaporation in vacuum, with low operation cost, obtaining distilled water with great quality that can be reused in the process again. This allows a considerable saving of water (approx. 98%) and obtains a concentrated product that can be mixed with almond peels. The high phenolic and fulvic content of the concentrate gives a value added product feasible for livestock feeding.

This technique is a truly zero liquid discharge (ZLD) system.

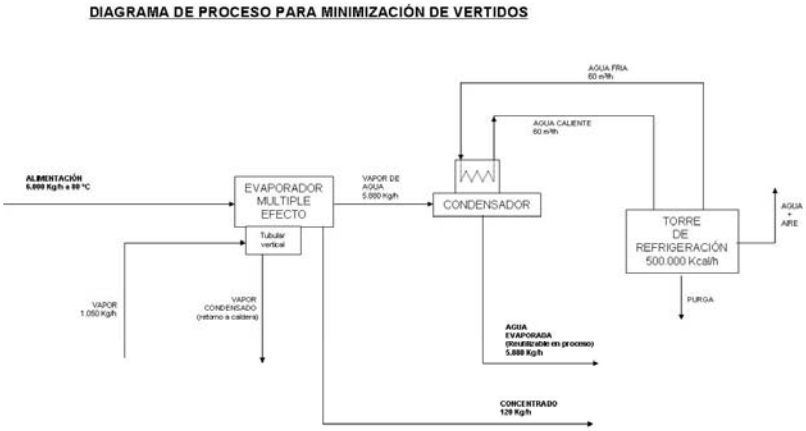
In this way, the environmental problems arisen by almond blanching and washing process can be solved at the same time than the reduction of the overall water consumption.

Reduction of 98% of the factory water consumption.

The technological feasibility of the project has been endorsed by a recognized body such as Centre for Industrial Technological Development (CDTI).

It solves the enviromental issues of almond washing and blanching water.

PROCESS DIAGRAM



Agua de Vertido
Relac. Minimización 50 : 1
6.000 Lts/h

INSTALLATION EXAMPLES

Installation ZLD (almond cropping water) for SIRVENT ALMENDRAS in Xixona (Alicante) with a treatment capacity of 6.5 Tm/h

INDETEC Tecnología Industrial

VENTO Maquinaria Industrial

La experiencia de un gran grupo