

Spiralex' Food Process Plant to handle fruit creams & purees



The plant is attempted to work with a high variety of fruits creams like apricots, peach, apples. The plant is designed to work up to 10 ton/hr of product with a product inlet temperature of 80 °C, a sterilisation temperature up to 110 °C and a outlet product temperature less than 40 °C.

Productline

The line will collect the product from their scredders machine and conveyed directly to our atmospheric tank equipped with an agitator design to meet product demands. A pump will convey the product from the balance tank to a dereator tank in order to take all the undesirable gasses off the product. Once deaerated, the product gets all the heat exchanger sized to sterilised and then cooled to be aseptic filled by a bag-in-box machine.

Equipment of product line

The equipment is formed by:

Balance tank

With a volume of 2,800 litres, it's designed with an eccentrical klopper bottom to allow full drainability. The tank is equipped with an agitator.

Deaerator Tank

With a volume of 2,400 litres, it's sized for removing the gasses from the product and it is equipped with a vacuum line proportionally controlled by control valves and pressure transmitters.

Pumps

Spiralex supply different positive displacement pumps to convey the product from balance tank to deaerator and then another more to convey the product to the HEX and filling machine.

Some centrifugal pumps are used in the water-heating loop as well as to process the cleaning solution in the plant.

A water ring pump is used to create the vacuum.





Heat Exchangers

Framed mounted its design respond to our standard farmaceutical mutitube heat exchangers, featured with double tube plate design specially indicated for high security customer's demands about hygienic design. This design allows checking visually any leaks produced on the welds in the zone of the tube-plate.

The system is formed by:

- 7 units 6 meters long on heating
- 8 units 6 meters long on cooling
- 12 tubes used for holding
- 1 multiways to permit select different holding times and adequate them to the process flow rate.



Control equipment

We delivered a complete electro-pneumatic control system in which an industrial PC panel colour OMRON NT-600 is used to control in automatic mode the whole system.



Others

Together with the system, we supply the heating water loops, all sanitary valves, all electronical instrumentation to be ENDER+HAUSER, isolation of the system, return lines form bag-in-box filling machine (not delivered by us) among others important elements necessary for a turn-key plant.

CIP system

Owing the CIP facilities are quite long distance from the place of the plant, we delivered together with the steriliser a CIP system designed to provide detergent requirements to our plant. The system is equipped with conductivity gauges being our system fully automatic.

REFERENCES

* HERO * JUVER ALIMENTACIÓN * CARGILL *
EUROCITRUS * UNILEVER * NESTLÉ * DANONE *
ORANGINA * NUTRICIA * SCHREIBER FOODS *
JACOBS SUCHARD * PARMALAT * NABISCO * KRAFT
* HEINZ * MANTEQUERÍAS ARIAS * LECHE PASCUAL
* REMIA * BARILLA * COCA COLA *.

Spiralex is a main supplier for thermal solutions in the pharmaceutical, food and chemical industries. Its thorough and project-oriented approach, its service and quick response makes Spiralex a reliable and major partner to many leading companies.

When you need additional information or advice, please contact Spiralex BV.



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