Product deaerator

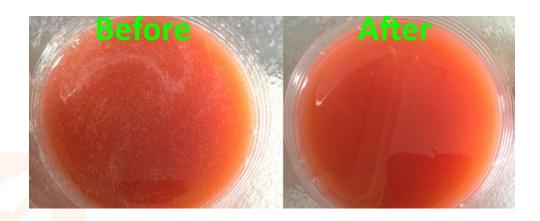






Deaeration:

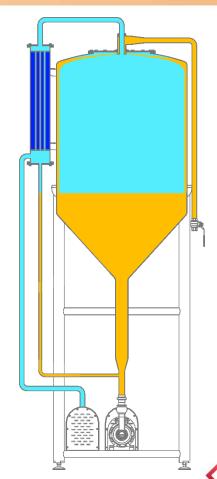
When processing fruit juices and purées, entrapped gasses, particularly oxygen, in the product after packing can seriously harm its quality. The inclusion of oxygen can promote enzymatic browning, destroying nutrients, modifying flavor and otherwise damaging quality. The product is treated with the vacuum-deaeration, in order to remove the incorporated and dissolved air in the product and consequently extend shelf life, and greatly enhances product stability.







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- The product is treated with the vacuum-deaeration, in order to remove the incorporated and dissolved air in the product and consequently extend shelf life, and this also greatly enhances product stability.
- The deaeration is performed by vacuum, in order to avoid oxidation. Product is fed through an inlet nozzle, which creates an even product layer on the inner container wall.
- The flowing film enables short diffusion paths for the gas bubbles coming from the product. Vacuum pressure is adjusted to the infeed temperature and product properties.
- Deaeration can be performed in cold or hot situation. In hot situation vapors with dissolved aromas are sucked from product.
- The aromatic vapors can be condensed and newly incorporated directly into the product by means of an aroma recovery device.





Design features:

- 1. Stainless steel frame mounted on leveling feet.
- 2. Vacuum chamber.
- 3. Inlet nozzle for even spraying the product on the wall of the chamber.
- 4. Vacuum unit, with liquid ring vacuum pump.
- 5. Product outlet, mono-screw pump.
- 6. Product inlet pipe.
- 7. CIP nozzles in the chamber.
- 8. Liquid level sensors for automatic functioning.
- 9. Electrical cabinet with control switches.

Extra, on request:

- A. Aroma recovery unit, with CIP system (D1000)
- B. CIP pump.







Examples of nectars, which puree was not treated with dearation:







FAQ:

Why deaeration should be integrated in production?

There are many advantages of deaeration:

- Helps avoid pulp and fibers floating up inside the bottle.
- Increased shelf-life of product.
- Reduces solute oxygen and avoids oxidation.
- The presence of air/oxygen causes vitamin C degradation (1 mg of oxygen corresponds to a theoretical loss of 11 mg of vitamin C), and can lead to discoloration and the production of strong off-flavors.
- Prevents problems during filling, especially foaming at hot filling, thanks to reduced gasses.
- Eliminates cavitation during homogenization.

Why should you deaerate juice?

Eliminating oxygen in juices is an important factor in maintaining product quality during their entire shelf-life.

