

Factors that Impact the Efficiency of Cream Separator Machine for the Food Industry

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Abstract

The primary function of cream separator machine is to separate the milk into two products i.e., cream and skimmed milk. The intention of this study is to evaluate the factors that has direct relationship with low performance and come up with a process that can enable to enhance the process of cream separation. The factors that were focused on the study were the understanding of centrifugal forces, impact of temperature towards cream separation efficiency, impact of vibration towards cream separation efficiency, and exploring the application of ultrasonic waves for efficient cream separation. And lastly, it was assessed that ultrasonic machine was an eco-friendly technology that could boost the separation process and it could act as supplement to heat-based technology.

Keywords: Cream separator; Centrifugal forces; Ultrasonic waves; Temperature; Vibrations.