



# Smoothing the way to coconut success

Effective wet processing solutions for coconut products



# Maximum efficiency and more profit

**Global demand for coconut products is on the rise. Coconut producers are therefore searching for innovative ways to improve product quality and boost yield while ensuring safety and minimizing operating costs. As a trustworthy partner to coconut producers worldwide, Alfa Laval has vast experience in providing reliable, energy-efficient processing solutions to help meet consumer demand.**

## **Processing nature's gift the Alfa Laval way**

Touted as nature's energy drink rich in vitamins and minerals, the coconut is a versatile fruit. Due to far-reaching health and beauty benefits, coconut products – from water, milk, cream, neera or virgin coconut oil (VCO) – are in great demand among consumers worldwide.

Preserving the natural coconut taste, colour and aroma is essential for consumer appeal. Which is why Alfa Laval has worked closely with coconut producers to provide them with innovative processes. These not only enhance product quality and value, but also increase process efficiency, product quality, yield and profitability.

sterilizers with direct steam injection (DSI) modules as well as plate- and tubular-based modules, and aseptic fillers for sterile packaging. Our vast experience, deep process knowledge and a broad equipment portfolio help processors get the most out of the fruit.

## **Coconut water pasteurization, sterilization, separation and evaporation**

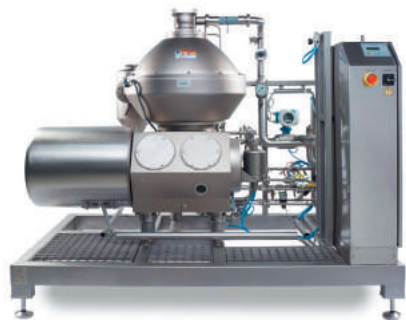
Ensuring gentle product treatment helps safeguard natural taste, texture, colour, aroma and health benefits. Using a combination of Alfa Laval separators and heat treatment modules ensures that unwanted substances are safely and effectively removed from the products.

Hermetically sealed, these separators feature the Oxy-Stop liquid seal that prevents product oxidation and the loss of volatile aromas or carbon dioxide. Specially designed Alfa Laval thermal modules minimize thermal damage thereby preserving the taste and consistency of natural coconut water. One such module is the Alfa Laval SteriTherm direct steam injection (DSI) module and FDA-compliant Alfa Laval bag-in-box and bag-in-drum aseptic filling systems designed for high pH products. More than 10 such filling systems have been approved by the FDA.

## **Complete coconut processing solutions**

As one of the world's leading suppliers of heat transfer, separation and fluid handling equipment and complete process lines, Alfa Laval helps food and beverage companies around the world to optimize operations and continuously improve processes.

We offer comprehensive coconut processing solutions as well as individual components. Among them are centrifuges for clarification and purification, pasteurizers for coconut milk and water,



Alfa Laval disc stack separator



Alfa Laval ViscoLine sterilizer



Alfa Laval aseptic filler



Alfa Laval plate pasteurizer



## Boost productivity and profitability

Many leading coconut product manufacturers in Indonesia, the Philippines, Sri Lanka and Thailand have installed complete Alfa Laval processing lines for coconut water, milk, cream and virgin coconut oil. These systems include separators, plate heat exchangers, DSI sterilizers and aseptic fillers. The results? Higher productivity, energy savings and better profit margins.

### Customized engineered-to-order process modules

As a global solutions provider, Alfa Laval offers modular skid-mounted process systems that are engineered to your requirements and fully optimized for your plant. Easy-to-install and ready-to-use, these factory-tested modules include:

- Fully automatic inline evaporator modules for high quality coconut water and coconut milk concentrates
- ThinkTop® valve modules with built-in sensors for optimum control
- Thermal modules, including pasteurizers, aseptic sterilizers, plate and tubular heat exchangers and DSI, for gentle product treatment

To ensure fast startup and commissioning, we perform rigorous pre-delivery testing on every module prior to delivery. Lower installation costs, a compact footprint and state-of-the-art technology are also advantages of using skid-mounted Alfa Laval process modules – not to mention maximum production efficiency and higher margins.

### Alfa Laval coconut processing equipment

Depending on your needs, Alfa Laval can provide individual equipment to existing process lines and complete modules for processing coconuts into high-quality products. All relevant engineering work can be supplied upon request.

- Alfa Laval ViscoLine™ tubular heat exchanger
- Disc stack separators
- Alfa Laval ultrafiltration system
- AlfaVap cassette evaporator
- Alvac aroma recovery system
- BaseLine and FrontLine™ plate heat exchangers
- AICip cleaning module
- Sanitary flow handling and tank cleaning equipment
- AlfaTherm pasteurizer
- SteriTherm direct steam injector (DSI) sterilizers
- Aseptic bag-in-box and bag-in-drum fillers
- Alfa Laval flow control and automation systems

These are backed by a full range of training and support services.

### Optimizing virgin coconut oil production for higher yields

Alfa Laval's three-stage separation system for the production of virgin coconut oil improves the end product quality. Processing in three stages results in the highest quality coconut milk, coconut cream and virgin coconut oil, with higher lauric acid values and lower peroxide values.

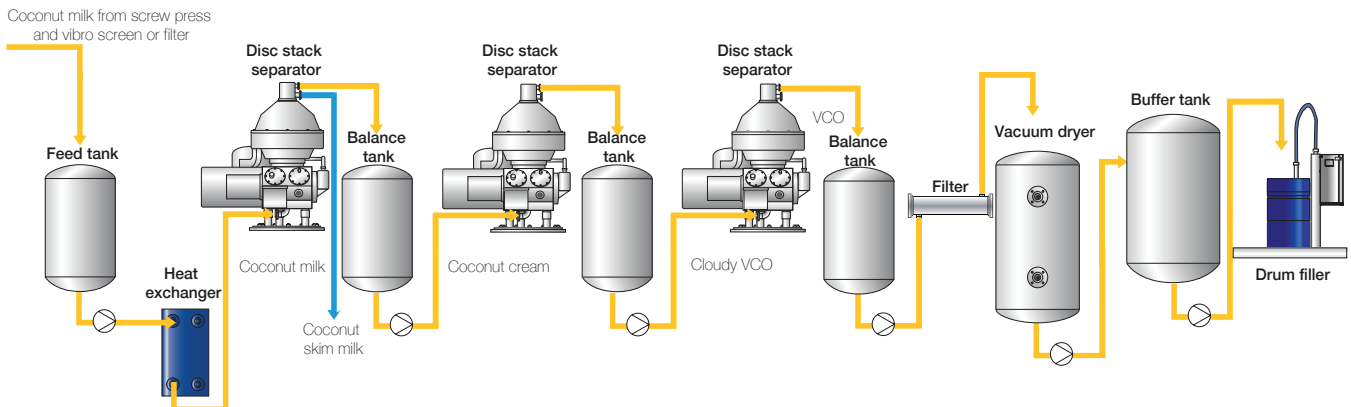
### Extending performance

To stay ahead of your competitors, it is crucial to continuously find new ways of improving your processes. We make sure that your equipment performs at its best – keeping you at the forefront.

### Why Alfa Laval?

- Global supplier with local support
- A single, reliable partner for all your needs
- Vast experience in delivering solutions for the coconut industry
- All components are pre-tested and meet the requirements of the 3-A Sanitary Standard

## Standard Alfa Laval three-stage separation system for virgin coconut oil production



## Alfa Laval in brief

Alfa Laval is a leading global provider of specialized products and engineered solutions.

Our equipment, systems and services are dedicated to helping customers optimize the performance of their processes. Time and time again.

We help our customers to heat, cool, separate and transport products such as oil, water, chemicals, beverages, foodstuffs, starch and pharmaceuticals.

Our worldwide organization works closely with customers in almost 100 countries to help them stay ahead.

## How to contact Alfa Laval

Up-to-date contact details for all countries are available on our website at [www.alfalaval.com](http://www.alfalaval.com)

