



Thousands of different types and varieties ...

... of tropical fruit are processed into either semi-refined or fully-finished wholesale and retail products by companies throughout the world.

Alfa Laval provides a complete range of technology, equipment and services that enable you to make the most of virtually any tropical fruit crops you wish to process.

Ensuring better, consistent yields of juices and purées with improved quality is a sure path to higher sales prices and rapid payback on your processing equipment.

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 to 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 Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com

PFT00263EN 0712



Truly tropical

Alfa Laval solutions for processing tropical fruit into juice and purée



ViscoLine and FrontLine are trademarks owned by Alfa Laval Corporate AB, Sweden. Alfa Laval is a trademark registered and owned by Alfa Laval Corporate AB, Sweden. © 2007 Alfa Laval.

The tropical touch



There are thousands of different types and varieties of fruit that are normally designated tropical because of their origin. Patterns of agriculture and global trade have subsequently brought about an even wider spread and greater diversity.

Juices and purées made from these large numbers of tropical fruits are now in great demand – both in local, domestic markets and in the wider, global marketplace.

Full spectrum of equipment
Alfa Laval equipment and systems are available for processing virtually the entire spectrum of tropical fruits. These include pineapple, mango, passion fruit, acerola, araza, lychee, guava, papaya, banana, star fruit, dragon fruit and many others.

We can supply all the equipment you need, either as individual units or as complete processing lines, with all sub-processes integrated for maximum end-to-end efficiency.

The efficiency and versatility of Alfa Laval solutions provide you with excellent opportunities for establishing cost-effective multi-fruit processing systems.

Full spectrum of know-how
Alfa Laval has more than 40 years' experience in satisfying the needs of juice and purée manufacturers all over the world. Our know-how in this field extends over the full spectrum of fruit, berries and vegetables grown in all the climate zones of the world. This provides you with the ideal pool of knowledge for improving, extending and developing your tropical fruit processing set-up.

Our specialist experience is backed by the R&D resources, materials technology and know-how available from the world's foremost specialist in the use of heat transfer and separation in food processing operations.

Use Alfa Laval equipment in your tropical fruit processing set-up to

- make sure your plant is easy to extend, to comply with your changing needs
- ensure that the juices and purées you produce comply with international standards and requirements, for better sales
- consistently get the most – and the best – out of all the kinds of fruit you process
- achieve maximum versatility, so you are not dependent on any specific crop or crops
- ensure exceptional plant reliability and stringent hygiene management.

Going global

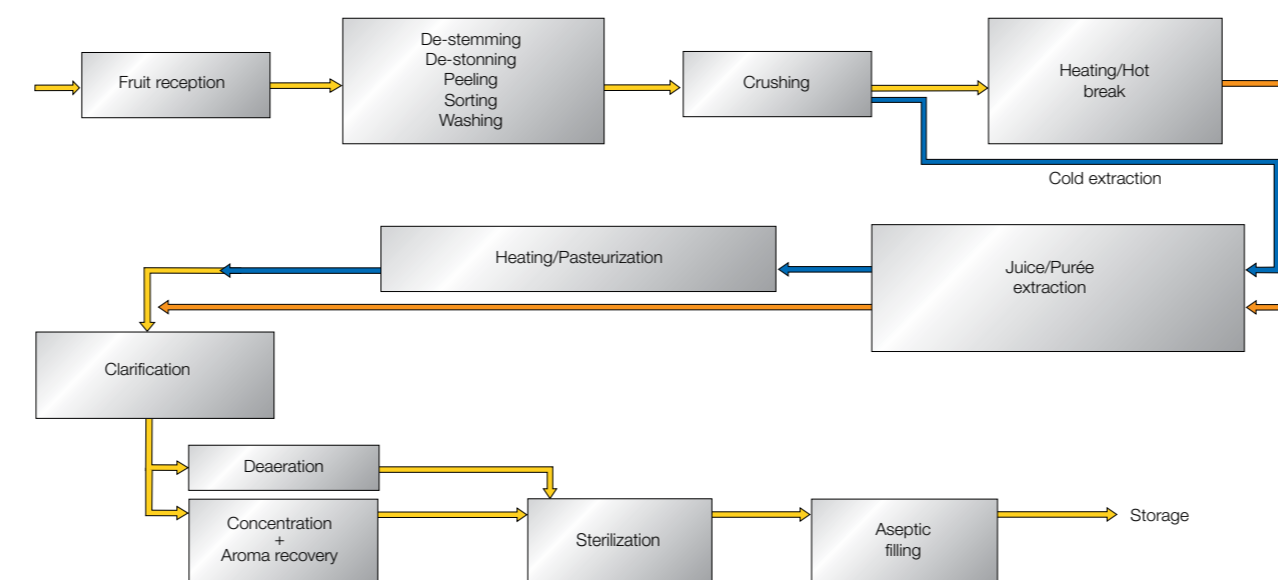
This vast body of know-how is available to our customers. We are fully familiar with all the international requirements – both technical and commercial – that you may encounter when tackling both commodity and niche markets throughout the world.

Alfa Laval can deliver equipment and plant configured to comply with the national and international codes and standards of your choice.



ViscoLine™ annular tubular heat exchanger module

The main stages in tropical fruit processing



The fruit is normally de-crowned (pineapple), washed, brushed (mango and others) and inspected, and any unsuitable fruit is removed. Specialized equipment is then used for the peeling, de-stoning and initial extraction of each particular type of fruit.

The resulting pulp or mash is treated using either hot or cold extraction methods, depending on specific juice or purée requirements, and on whether yield, viscosity, colour or taste are prime considerations. The extraction of purées such as mango, guava and papaya takes place using a turbo-extractor to ensure maximum yield.

Clarification of cloudy juices such as pineapple and passion fruit takes place in a Foodec decanter centrifuge or disc stack centrifuge to ensure the specified pulp content. Any black specks present are easily removed using the same Foodec unit.

Concentrating cloudy juices to the required strength – and purées to double strength – takes place in an AlfaVap cassette evaporator. This provides a low temperature and short residence time that together ensure the best possible natural colour and taste.

Special Alvac aroma recovery systems are used to capture the aromas.

For single-strength juice or purée, the product must be deaerated before it is filled into containers.

The resulting juices and purée concentrates are normally pasteurized with an AlfaTherm unit or sterilized with a SteriTherm, prior to aseptic packaging in bag-in-box containers.

The different characteristics of juice and purée require different processing equipment. Juices and purées are therefore normally processed in separate lines.

Adding value from start to finish
By combining highly efficient equipment, excellent processing performance, operating reliability and premium-quality results, we enable you to make sure of achieving the best possible juice and purée yield from any crop.

Ensuring consistently high quality and an attractive appearance, as well as retaining full nutritional value, requires protecting juices and purées from physical stresses and heat impact.

Alfa Laval solutions help you do this effectively, and to achieve colour, aroma and taste that ensure you the best possible price – whatever current market conditions may be.

From know-how to results
Our end-to-end familiarity with all practical aspects of juice and purée processing means we can help you avoid problems with starting up new equipment or processing lines.

Our specialist know-how also enables us to analyse the cause of any particular problem, and provide you with rapid solutions that keep your production line running and your income rolling in.

Hands-on help
Configuring new process steps – and upgrading existing ones – involves many different technologies and systems that have to be adjusted and fine-tuned to make sure they work together perfectly.

Alfa Laval tropical fruit processing systems are accompanied by all the support, training, service and maintenance services you need to get the very best results.

Alfa Laval provides complete lines for processing tropical fruit into high-quality juice and purée – along with all relevant engineering work, if required.

Alfa Laval equipment for tropical fruit processing includes

- Reception, inspection, washing and conveyor
- Peeling, destoning, crushers, extraction equipment and finishers
- Foodec decanter centrifuge
- Clara disc stack centrifuge
- BaseLine/FrontLine™ plate heat exchanger
- Alfa Laval membrane filtration system
- Alrox deaerator
- AlfaVap cassette evaporator
- Alvac aroma recovery system
- AlfaTherm pasteurizer
- ViscoLine tubular heat exchanger
- SteriTherm sterilizer
- Aseptic bag-in-box filler
- AICip cleaning module
- Sanitary flow handling and tank cleaning equipment
- Flow control and automation system.

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



The Clara disc stack centrifuge module