



Efficient agitation adds to the mix

The complete line



Agitators right where you need them

Modular tank-mounted agitator systems are a key part of the overall Alfa Laval strategy for supplying a complete range of equipment for the tanks used in process industry.

The big advantage for the entire range is that they provide gentle, controlled agitation designed for maximum effect, while only using a minimum of energy.

Each model is designed for a specific type of mounting, and different versions are available to comply with a wide range of hygienic standards and requirements.

Multiple configurations

Alfa Laval agitators are based on a modular design that consists of:

- Drive unit (consisting of the drive motor itself and the shaft support. Each shaft is available in different diameters and lengths to meet different operating requirements)
- Energy Saving Foil EnSaFoil propeller (with two or three blades. Different surface finishes are available)
- Seal arrangement (different shaft seal types combined with oil trap)
- Other optional equipment.

Combining these elements in different ways makes it easy to configure a unit to meet virtually every requirement.

Modular advantage

You can install Alfa Laval agitators in both pressurized and non-pressurized tanks and use them in sterile/aseptic applications if necessary.

The modular design of Alfa Laval agitators makes sure you only pay for what you really need. Each type can be configured for particular duties and levels of finish, as well as for different tank shapes and sizes, to meet your specific requirements.

The modular construction is also configured with the aim, to comply with both European and American regulations, including EHEDG, USDA, FDA and 3A standards.

ATEX certification and material certificates are available on request.



Airfoil advantage

The unique shape of the Energy Saving Foil EnSaFoil propeller provides a very high flow rate, at the same time as only needing small energy inputs from the drive motor.

The efficiency of an EnSaFoil propeller is up to 400% better than for a propeller with blades of standard pitch.

Designed for effect

Alfa Laval agitators are designed to provide maximum mixing effect with a minimum of energy input.

To achieve this, Alfa Laval experts use many different computerized analysis methods and design systems. These include FEM (Finite Element Method) calculation software, the SALS design system and advanced 3D CAD systems.

Cost reductions all round

Alfa Laval agitators are specially designed for extra-low energy consumption. This enables you to reduce your energy costs for agitation by as much as 80%.

Other benefits include low maintenance costs due to a very long seal service life, and greater productivity because of reduced downtime.

You can also replace the seals from outside the tank, with no need to enter and dismantle anything inside the tank.

ALT top-mounted agitators with no bottom support

ALT agitators are characterized by having a shaft that does not need bottom support.

This makes it easy to get at everything inside the tank for inspection, cleaning and maintenance. Because there are no fittings in the bottom of the tank, Alfa Laval ALT agitators are normally the solution of choice when hygiene standards are the prime focus.

The ALT design features a robust support mounting fitted outside the tank. The special design of this shaft support frame, with a detachable shaft and internal coupling, eliminates any hygiene problems with a coupling inside the tank, and makes both installation and maintenance quicker and easier.

ALTB top-mounted agitators with bottom support

The shaft used in ALTB agitators is supported inside the tank by a steady bearing at the bottom. Despite this, Alfa Laval ALTB agitators are normally less expensive than comparable agitators with no shaft support inside the tank.

Alfa Laval ALTB agitators have the advantage that the operating forces of the agitator unit are shared between fittings at the top and bottom of the tank. This makes this design ideal if there is only limited space available above the tank. A drive shaft with a smaller diameter can be used.

Alfa Laval ALTB agitators are available with two types of bottom support – the BS1 for when long bush service life is a prime concern and the BS2 with especially easy cleaning for when high hygiene standards are important.

ALS side-mounted agitators

Alfa Laval ALS agitators are side-mounted units widely used in storage tanks and silos. They are normally used for low-viscosity products and for keeping the product inside the tank homogeneous.

These units are notable for being a cost-effective design that is easy to install and has exceptionally low maintenance and operating costs.

ALB bottom-mounted agitators

Alfa Laval ALB agitators are specifically designed to be mounted on the bottom of the tank. This means the upper part of the tank does not need to be built to bear the weight of the agitator unit, paving the way for savings on both purchase costs and installation costs for the tank.

An additional benefit is that a bottom-mounted agitator can normally be operated – as well as inspected and serviced – from ground level, saving on time and manpower.

Alfa Laval ALB agitators can also be fitted with a special sanitary-quality sterile seal for high-pressure applications and aseptic use.



What it does

Keeps tank contents homogeneous

Mixes different product components together

Disperses one product component within another

Maintains a consistent suspension of particles within a fluid

Makes sure heat is transmitted evenly throughout a product mix

Dairy fermentation, including mixing and breaking up coagulated particles

Where it's used

Storage tanks for milk, whey, cream, mixed dairy products, UHT products, etc.

Mix tanks for drinking yoghurt, fruit juices, flavoured milk products, sugar syrup products, oils, etc.

Tanks for powder proteins, vitamins, minerals, milk powder, oil mixes, micro salt mixing, milk products, etc.

Tanks for fluids such as fruit juices that contain either solid or semi-solid particles. Also used in crystallization tanks.

Tanks fitted with a dimple jacket for either heating or cooling.

Fermentation tanks for yoghurt, crème fraîche, cheese cultures, etc.



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

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