



Gama SF Flotation Separator

The success in choosing a physico-chemical, biological or thermal wastewater treatment depends on the condition they get to the feeder. High efficiency results are only achieved by means of a careful separation of floating and settling particles which could not be retained by screening or thick filtering systems.

The SF involves equipment specially designed for eliminating particles and substances floating in waste water before physico-chemical, biological or thermal treatments. Thus, dysfunctions and obstructions such as sandbeds or activated carbon ones, or excessive sludge production can be avoided. Oils, fats, detergents, filaments, plastic screenings, cork, vegetable or wood remnants are some of the floating substances that are able to be separated.

The equipment operation is based on hydrostatic behaviour of non-miscible substances in water, with different densities. This is shown through specific settling and flotation values. The equipment is designed to set a system of layer flow that enhances separation. (without any turbulence or mixing, at low speed and high residence time).

Based on its innovating spirit, our R&D Department has designed and developed high-efficiency SF Separators to make it easy the division of bothering components present in wastewater which sometimes limit further wastewater treatments.

Minimum Maintenance

This type of separators makes cleaning easy and occasional. High pressure water cleaning is only required once a year by emptying the machinery. As there are no movable or rotating parts, damage and undesirable stops rarely occur. Maintenance, spare parts and stock costs are also considerably reduced.

The graded and funnel shape of the receiving basin makes it easier the flow of floating particles to the exit and their further collection for future management.

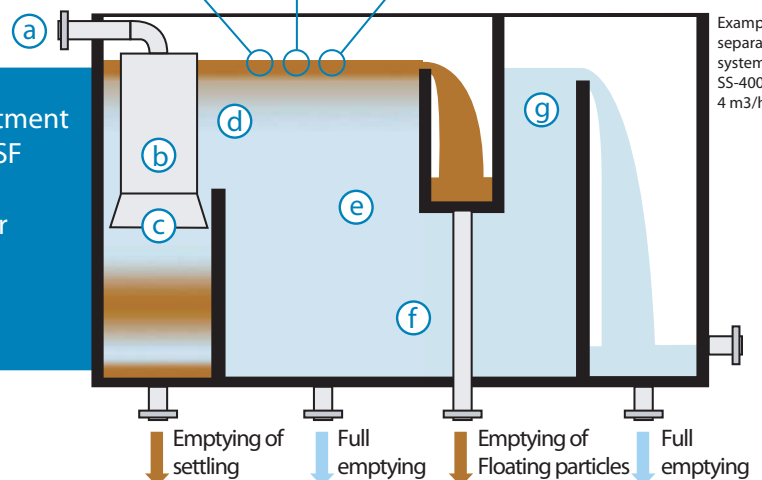
Separation features

The separator hydrodynamic design permits different types of flows in plates since the moment the fluid leaves the settling section (item d). Such low Reynolds(Re) remove the mixing factor and, therefore, promote the hydrostatic lifting force of the components to be separated. Appropriate residence time contributes to the separation process. This plate system is present in the whole process until spilling or landfill.

Types of flow

turbulent transitional in layers

	a	b	c	d	e	f	g
Re	28000	4700	3100	1900	120	130	1700



Example of a separation system for SS-4000 with 4 m³/h capacity



Gama SF Flotation Separator

Description

Made of high-density polypropylene reinforced with metal frames covered by PP.
Double interior walls and reinforced guides.
Fully guaranteed rigid structure.

Accessories

Supplied with or without (sectional) lid.
Empty and outflow pipes can be used either for the bottom or the sides.

Batch (manually operated) or continuous floating particles outlet. In the latter, it is not required constant operator monitoring. In some other cases, monitoring is necessary to prevent from spilling and failures.

SF separators can be tailored designed to specific requirements during the process.

Users

Waste management

Water treatment

Recuperators and recyclers

Metal Mechanical Industry

Food Industry

Water Treatment companies

Activities connected to separation of floating components from sewage.

Advantages

It allows almost 100% separation at the non-miscible phase.

Flow Settling components are retained.

Products are designed to provide industrial-scale service treatments.

Free (gravity) or pump feeding.

Outlet is free and basin discharge is recommended for further water treatment. In case direct pumping from the final collection tank is desired, pipes or fittings are installed to mount levels which regulate pump operation, at customer's request .

Several outlets either for full / partial emptying or easy cleaning are available.

There are no gears, movable or electrical parts at all. Watertightness failures caused by leakage are avoided and corrective measures are reduced.

If the level of the floating particles is low, separation is not applied due to the nature of the equipment; those particles will be collected until the hydrostatic level allows their outflow.

When using Gama SF separators, sudden large volumes of flow variations are possible thanks to the soothing bell and settling deflectors without affecting its separation capacity.

Maintenance is almost not necessary and is only limited to occasional water cleaning (hose) of the floating particle collection basin.

abac

O'donnell núm. 29 baixos
43202 Reus
tel 977 326 051
fax 977 323 178
info@abacconsultors.com
www.abacconsultors.com