



Separator

OUR PATENTED SEPARATOR was originally developed in 1980 and has been further refined ever since. That means that 30 years of R&D has gone into the three current models designed for separating particles such as fat and oils from liquid, for work as a flotation plant, and finally as a sedimentation plant.

AS YOU READ THIS our separators are busy at work in more than 50 industrial branches all over the world, in municipal water treatment and even on board ships!

SO HOW DOES the separator work? That depends on the situation. If, for example, the particles that you want to separate are the same weight (or lower) as the liquid we use dissolved air. The micro bubbles act as “life-jackets” that lift the particles to the surface. In another situation we would perhaps use chemical preparation of the liquid, it all

depends on the specific demands of the situation.

NO MATTER WHAT configuration, be it in combination with dissolved air and/or chemical preparation units, the separator always ensure high cleaning levels of waste water and process liquids. In biological treatment processes the separator is used as a particle separator. And even though the three models are somewhat different some things remain the same: high degree of particle separation, an extremely good tolerance for variations in flow. A comparatively small size makes for easy installation and low installation cost. A low energy consumption gives low running expenses and ease of maintenance adds to that.

THE STIGEBRANDT SEPARATOR has been tested by national investigation institutions,

by universities and by independent engineering companies who all verify the efficiency of the separator.

Of course we're happy about that. But we are even more proud of where and how the Stigebrandt Separator has proven itself over and over again: in the real world, in every context it has ever been put to work.

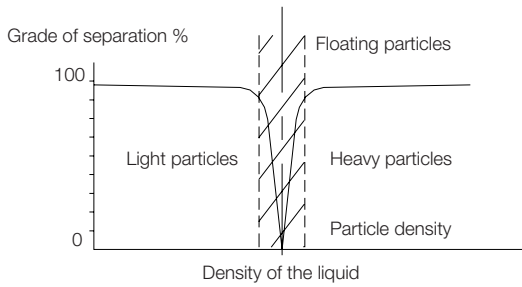
ADVANTAGES

- » High degree of particle separation
- » Very good resistance to variations in flow
- » Small size
- » Easy installation
- » Low energy consumption
- » Low maintenance costs
- » Very high reliability

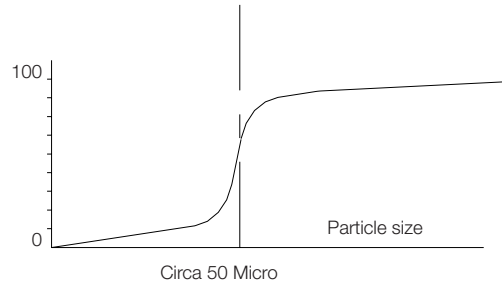


STIGEBRANDT
HYDROTEKNIK AB

simply functional



Dissolved air is used when the density of the particles are the same, or lower, as the density of the liquid.



Chemical separation is used when small particles are dissolved in the liquid.

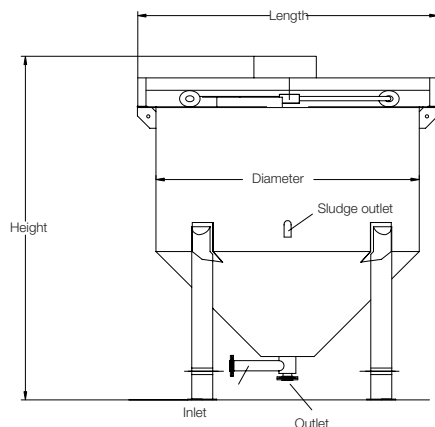
Performance

The capacity is big; 15 m²/m³ per hours in applications with chemical precipitation and flotation. At this capacity the liquids residence time in the separator is about 10 minutes.

This makes the installation takes up little space, which entails low investment costs for both machinery installations and buildings compared to many other systems.

- Separation of defined light particles (such as fish fat).
- Surface loads of approximately 3 m/hr
- Enhanced flotation using dissolved air, (without chemicals).
- Surface loads of approximately 6 m/hr
- Separation with chemical precipitation and the addition of polymer.
- Surface loads of approximately 15 m/hr at major facilities
- Surface loads of 10 m/hr at smaller establishments, provided the use of dissolved air.
- Maximum amount of separated particles: 25 kg DM m²/hr

Model	Effect (m ²)	Diameter (mm)	Length (mm)	Height (mm)	Volume (m ³)	Dead weight (kg)	Weight with water (kg)
FA02	0,2	630	950	1580	0,25	90	300
FA05	0,5	950	1175	1720	0,50	160	700
FA10	1,0	1250	1550	1880	1,00	230	1.300
FA20	2,0	1750	2150	2200	3,00	310	3.400
FA30	3,0	2030	2550	2550	5,00	4,20	5.600
FA40	4,0	2500	2700	3945	9,00	800	10.000
FA60	6,0	3990	3800	3825	17,0	1200	18.500
FA80	8,0	3250	4250	3810	19,0	2000	20.600
FA110	11,0	3950	5000	4400	37,00	3.000	40.000
FA160	16,0	4700	5450	5100	60,0	4.000	65.000



Every separator is designed and built according to the conditions and requirements of each specific case.

The working principle of the separator allows the placements of the inlet and outlet pipes and the sludge outlet to be almost arbitrarily placed around the periphery of the separator. This makes it possible to design the separator to fit an existing location and also simplifies installation.

