

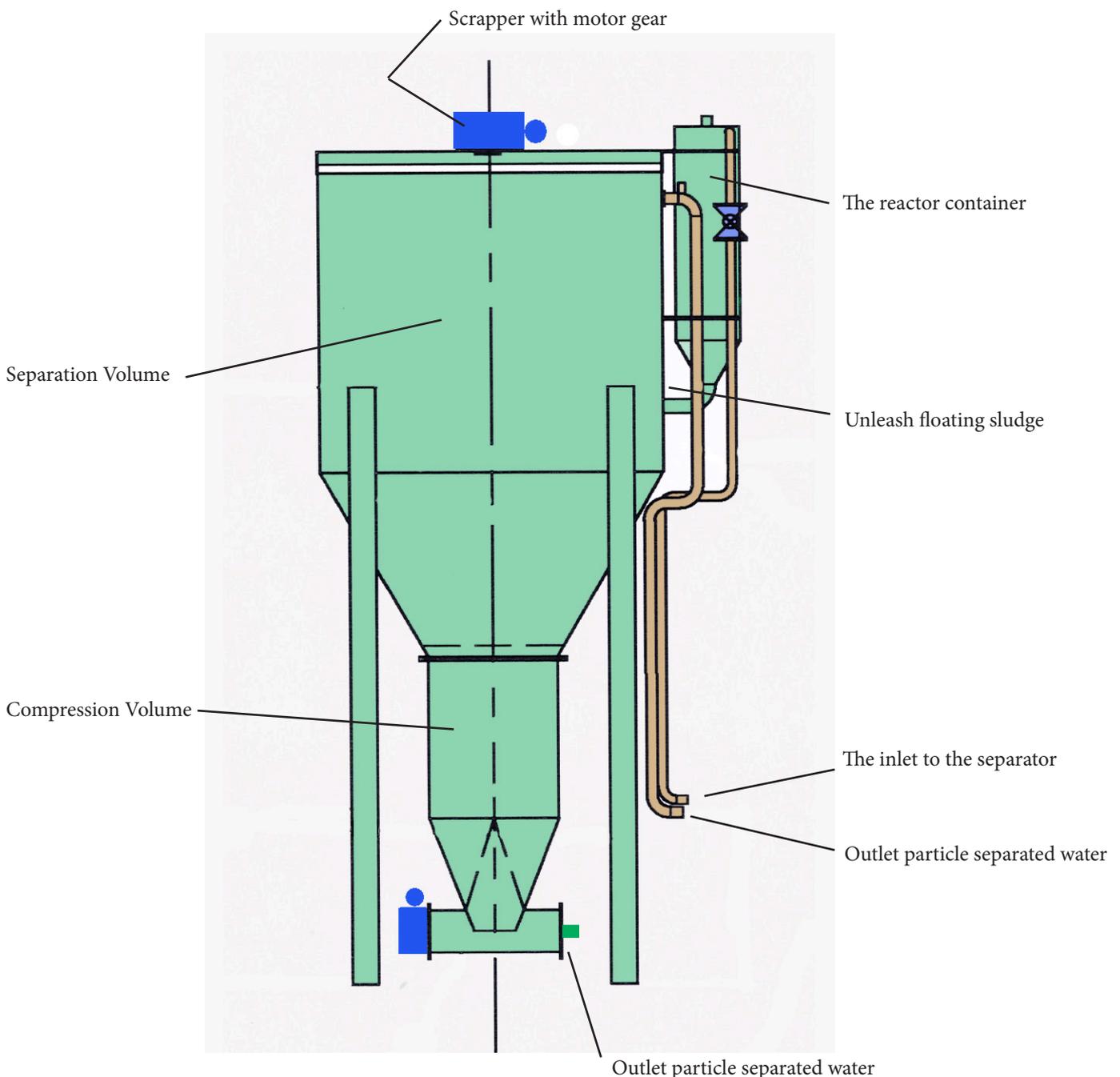
Stigebrandt separator SA-special

The Stigebrandt Separator Type SA-Special is designed to separate and concentrate particles from the mining industry and other businesses where heavy and light particles are to be separated from water.

The separator processes large volumes of process water per unit area, and the separator separates virtually all particles regardless of size.

The separator is designed with a patented device compacting the deposited sediments, where sediment is compacted to achieve a higher density and a higher dry matter content.

Particles deposited in the separator are pumped out with the appropriate pump or auger.



The Stigebrandt Separator SA Special is designed to remove particles from a fluid stream. The separator takes out both light and heavy particles. The separator has been developed based on the mining industry's needs, but it can also be used for material separation and recycling of both materials and water in many other areas, such as the iron and metal industry, food, sand and construction industries, amongst others.

Light particles are skimmed off at the surface and transported to a sludge pit, from which the particles are removed by pump or by gravity to a collection container.

Heavy particles, f.ex tailings, settle to the bottom of the separator and are transported from here to a pump or transport screw etc.

The separator compresses the heavy particles, which means that the amount of suspended sediment is reduced dramatically whilst the sediment water's content decreases and the sediment density increases.

By pre-treatment of the water with a flocculant, the particle content of the water is reduced by nearly 100%.

The water may often be re-used in the process or in another manner.

Upon treatment with flocculant, all the particles in the water collect together regardless of particle size as compressed sludge.

The technology used in the Stigebrandt Separator SA is internationally patent pending, PCT Application nr. PCT/EP2013/060300



Inlet water to the separator contains minerals with c:a 18% concentration and density 3,5.



Outlet water after treatment in the separator. The water is almost free from particles



Outlet of sediment from separator with about 80-90% concentration*).

Example: 1 m³ treated.

Cleaned water=952 litres

Sediment volume =58 litres

*)Sediment concentration is connected the size of the particles.

Technical information:

Electric consumption for separator: inlet pump, sediment outlet pump, mechanical scraper motor, sediment transport motor. Polymer dosing equipment.

Polymer consumption: 5-20 gram/m³ treated water (related to particle concentration in water)

Capacity: prefabricated units up to about 300 m³/hour. Larger separators will be constructed on site. The separator works continuously and fully automatic.

Maintenance: There is a low need for maintenance and spare parts