allflux®

Applications
Sand, ore, coal, heavy mineral sands, slag

Advantages
Classifying, separating, thickening and desliming in one step, high efficiency, high capacity in a single unit, online or offline production of customized sand, wide ranges in feed solids concentration, low maintenance, low energy costs

Technology
- fluidized bed separator for the production of 3 classified products
- fluidized bed with autogenous heavy media
- particle size ≤ 4 mm (3/16”)
- throughput rates of up to 2000 m³/h (8000 gpm) in a single unit
- separation of light particles from fine materials
- fully automatic process control
- no moving parts
- production of customized sand by blending online or offline

The allflux® separator uses fluidized bed technology for the separation and hydraulic classification of slurried fines. The two-step process permits the handling of slurries without pre-thickening. The coarse and heavy particles are separated in the coarse section.

The discharge of coarse material out of the central hopper is automatically controlled by an analog system utilizing a density probe and a pinch valve. Fine material and low-density particles overflow the coarse separation section.

In the peripheral ring, called the fine section, the separation of light particles from the fines and desliming takes place. Particles of a lower specific gravity than the fluidized bed will remain above the fluidized bed and will overflow with most of the process water to the overflow chute.

Due to a number of improvements and new control-software, the allflux® separator is not only able to separate light organic particles from sand, but also automatically blend the coarse and fine discharges to produce customized particle size distribution products.

Since the introduction of the allflux® technology to the concrete and sand industry many more applications have been discovered. Fine coal recovery from ponds, iron ore and mineral sand concentration and high quality glass sand sizing are just a few examples of this unique technology.