

# SPECO® GRITSEP

Fluid Dynamic Grit Classifier

FGC



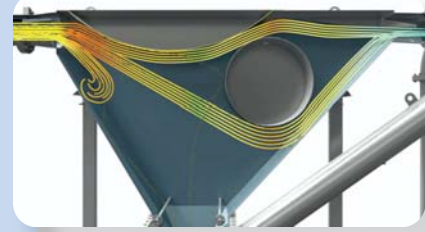
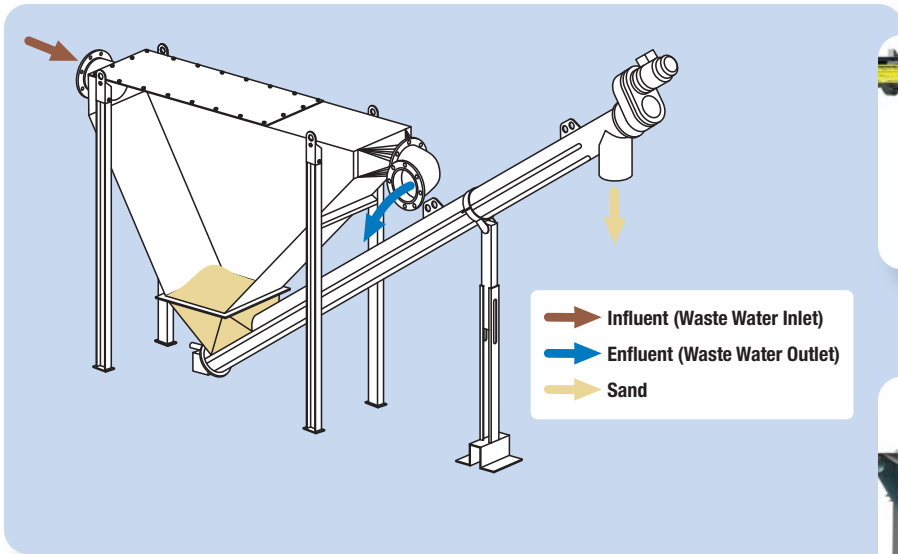
SPECO®



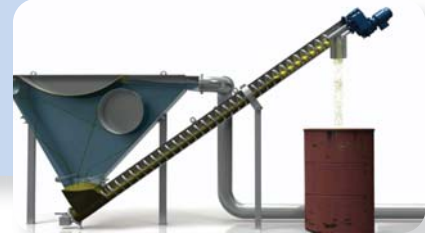
## High Separation in a Small Footprint

The GRITSEP Fluid Dynamic Separator is an innovative sand and grit classifier designed using advanced simulation software. The result is the most compact, economical grit classifier available with the highest separation rate at 95% sand removal. Special fluid dynamic features have been designed into the separation process in order to achieve a high level of sand/grit separation as well as the extraction and dewatering of larger solid material. The GRITSEP FGC is characterised by a simple, space-saving structure with advanced design features.

- 95% sand/grit removal of particles  $\geq 200 \mu$ ;
- A fully-welded separation tank;
- Durable, heavy-duty shaftless extraction screw;
- Low drive power for reduced operating costs;
- Small footprint
- Requires 40% less space than conventional classifiers.
- Higher capacity at significantly lower cost.
- Does not need a cyclone.



Multiple points of contact settles more sand, faster.



Optional aeration removes floating organic material.



A compact, high efficiency grit separation system.

## Principles of Operation:

Grit laden liquid is pumped into the back of the unit at the flange connection indicated by the brown arrow. The fluid dynamic activity is enhanced by the multiple points of contact presented to the liquid and grit upon entering the tank. These multiple contacts force the grit to settle faster and in larger volume than standard grit separators. The extraction screw turns intermittently as it conveys the sand to discharge. This intermittent operation of the screw allows the clean, organics free sand/grit to drain and promotes further dewatering and a dryer product. The grit-free liquid flows out the front discharge pipe as indicated by the blue arrow.

Optional air injection in the bottom of the tank above the grit bed increases separation of the grit/sand and organic matter. Micro-bubbles help remove floating organic material which then exits together with the liquid at the top of the tank.

## Model Specifications

Model	Flow Rate	Grit Extraction
	GPM	ft <sup>3</sup> /hr
FGC 005	79	35
FGC 008	132	35
FGC 015	238	35
FGC 025	396	35
FGC 036	572	35



Patented in the US