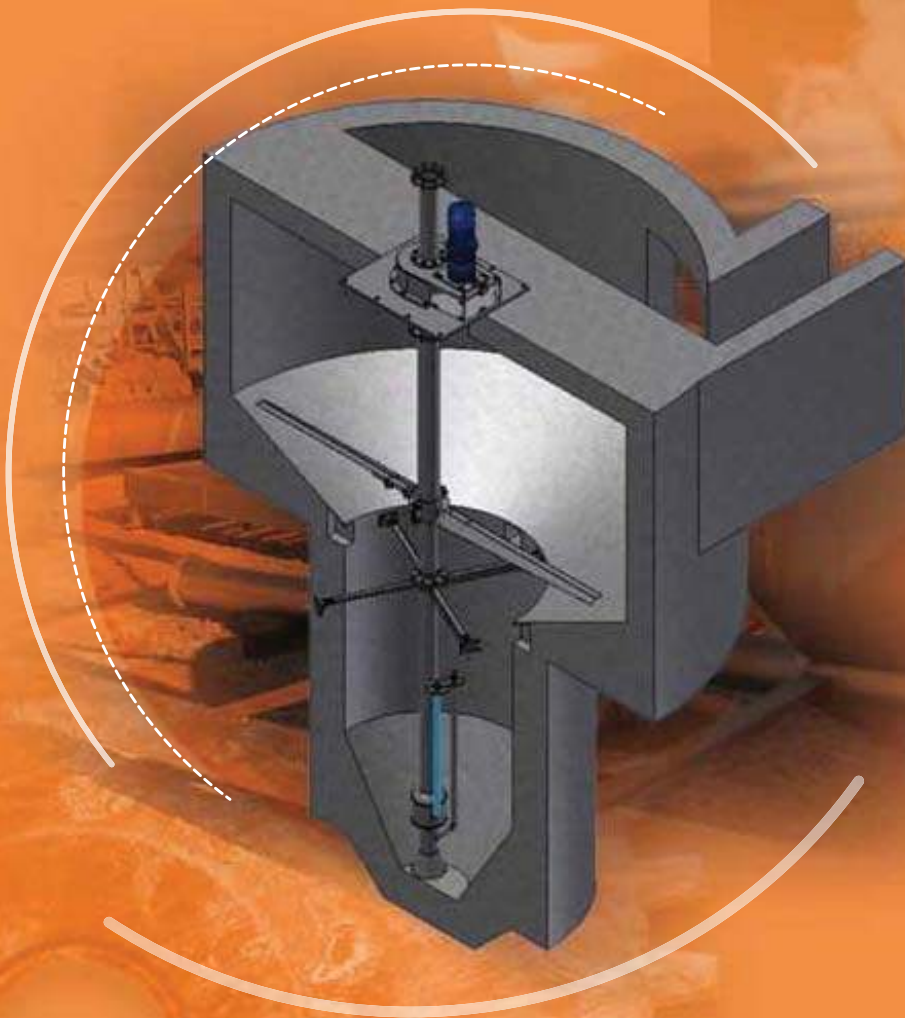




Grit Removal System

DSP



The SAVI vortex-type sand removal system, model DSP, is successfully installed in over 70 wastewater treatment plants. Grit is a significant contributor to operational and maintenance problems in plants of all sizes. The abrasiveness of grit can shorten the life of mechanical equipment and build up in treatment basins and piping system.

This vortex system consists of five key components. The grit inlet from the channel discharges directly into the grit collection chamber. The design of the collection chamber and the angle of the grit inlet sets up a vortex inside the chamber. Grit is forced toward the sloping sides of the chamber and settles to the bottom. Because of variable flow conditions, agitator arms mounted at 45 degree angles maintain a constant vortex velocity inside the grit chamber. An airlift or mechanical pump remove the grit from the bottom of the chamber and discharge it into a grit classifier or grit washer. Finally, the grit-free wastewater overflows into the channel and proceeds into the plant for treatment.

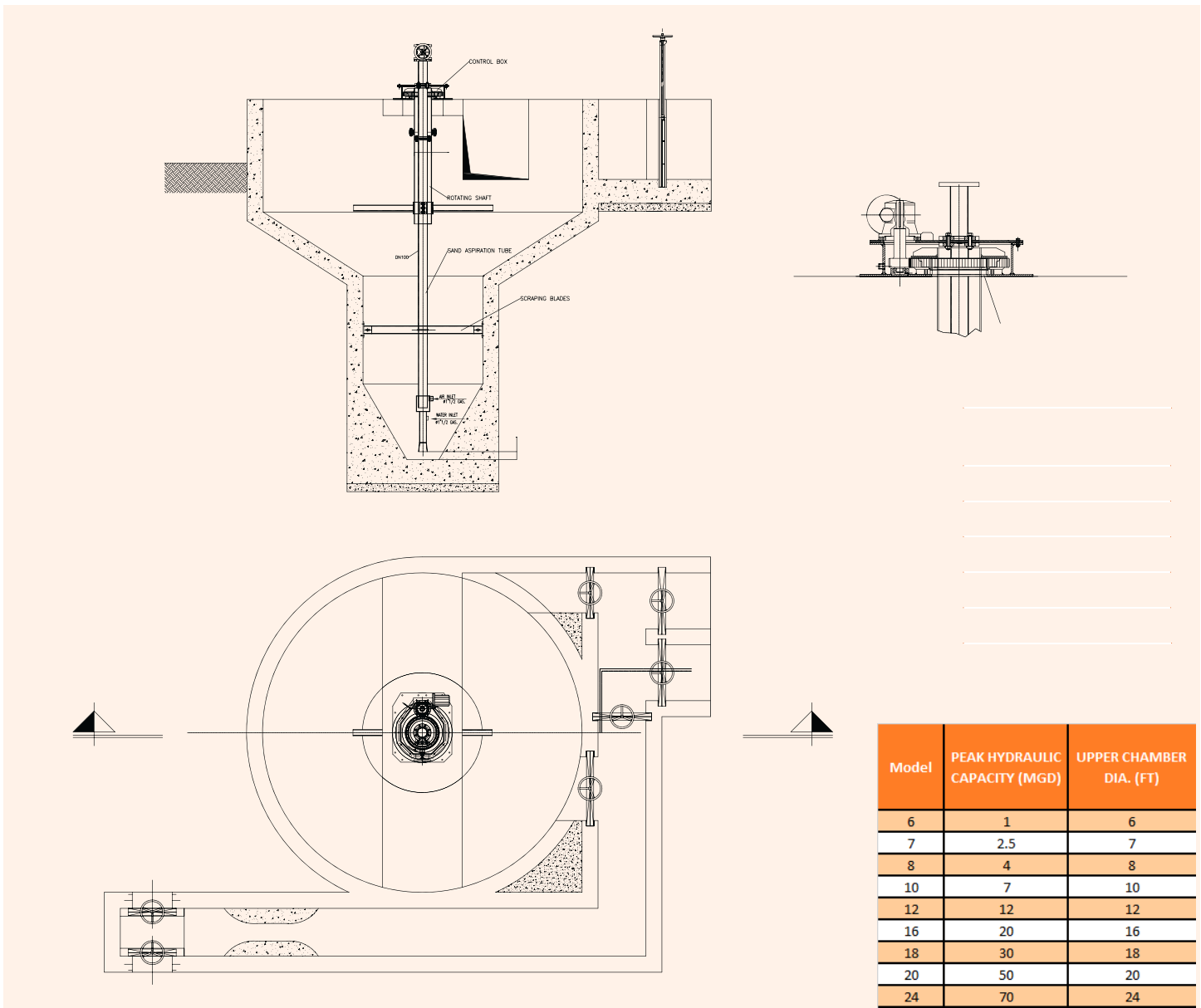


Grit Capture of 2.65 SG Material:

Grit equal to or greater than 50 mesh in size: **95 %**

Grit equal to or greater than 70 mesh but less than 50 mesh in size: **85 %**

Grit equal to or greater than 100 mesh but less than 70 mesh in size: **65 %**



Model	PEAK HYDRAULIC CAPACITY (MGD)	UPPER CHAMBER DIA. (FT)
6	1	6
7	2.5	7
8	4	8
10	7	10
12	12	12
16	20	16
18	30	18
20	50	20
24	70	24