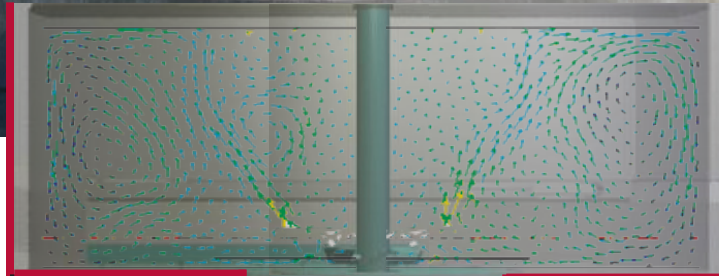


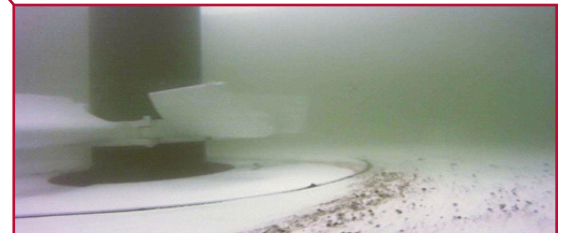
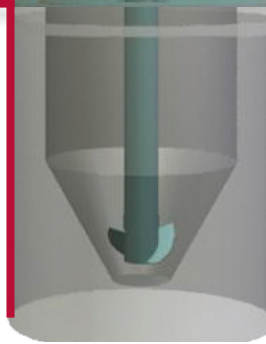
## Achieve Superior Grit Removal for the Lowest Total Cost of Ownership



ANSYS Upper chamber hydraulic profile

### The PISTA® Difference

Hydraulic vortex removal with S&L's proprietary flat-floor and internal baffle design makes the **PISTA® 360™** completely unique from all other grit removal systems, which rely on less efficient settling properties and larger tank sizes. Offering the lowest life cycle costs for superior grit removal, the **PISTA® 360™** delivers tremendous value for plant investment and rises above all other grit removal systems in these critical areas:



Hydraulic action from chamber geometry sweeps grit toward hopper.

- **S&L Hydraulic Removal vs. Others' Settling Methods** - Inside the grit chamber, the **PISTA® 360™** design causes grit to be hydraulically swept across the flat chamber floor toward the center opening (unlike conventional sloped floor and stacked tray settling systems). The **PISTA's** chamber geometry – not the center propeller – is what induces the vortex action. The propeller's primary function is to lift and separate the lighter organic particles in the flow while the heavier particles are driven to the center opening as shown above.
- **Superior Grit Removal Efficiency** - 95% of grit particles down to 105 microns (140 mesh) is the industry's best against the true grit that causes headaches for any plant operation.
- **Lowest Total Installed and Energy / Utility Costs** - Compared to conventional sloped-vortex and stacked-tray settling systems, the **PISTA® 360™** with a 10:1 turndown typically offers smaller tankage – resulting in significantly less concrete for installation and the elimination of downstream level control. With considerably less power and utility water requirements, its operational costs are significantly lower over time.
- **Unequaled Innovation, Experience & R&D** - No company has dedicated more to successful grit removal than S&L. Decades of R&D, continual new product innovations backed by 2,500+ installations, the most of any grit removal system supplier.

# PISTA 360™

WITH V-FORCE BAFFLE™

## System Components

**95% GRIT REMOVAL**  
DOWN TO 105 MICRON PARTICLE SIZE

### Coanda Ramp

Engineered entry facilitates laminar flow so that it takes a steady tangential direction as it enters the grit chamber and properly conditions the grit for entrapment.

### Inlet Channel

Controls velocity of influent and draws grit to the grit chamber floor.

### PISTA® V-FORCE BAFFLE™

New, patented innovation enhances removal efficiency for low-flow periods and offers design engineering benefits.

### PISTA® Grit Fluidizer

Patented blade exclusive to S&L design. Loosens collected grit, preventing compacting.

### Bull Gear Drive

Provides minimum service 5.0 factor and trouble-free operation.

### PISTA® TURBO™ Grit Pump

[Top-Mounted & Remote-Mounted Options]

Removes grit from storage hopper to washing and dewatering. Available in vacuum-primed and flooded suction arrangements. Now available with SONIC START® prime sensing.

### Outlet Channel

S&L can assist with design information for optimal performance.

### Exclusive Flat-Bottom Basin Floor

Facilitates the forced vortex flow pattern inside the chamber. Minimizes organic capture while hydraulically directing grit into lower hopper. Patented, 360-degree in-line design.

### Hopper Cover Plate

Stationary and recessed, it removes for quick access to storage hopper.

### Axial-Flow Propeller

Aids in directing organic-free grit into lower hopper by enhancing flow patterns. Rounded edges prevent solids build-up, thus ensuring high efficiency.

### Storage Hopper

Stores removed grit prior to dewatering.

## Key Cost-Saving Benefits

### # of Units Required

The wider 10:1 turndown can reduce the number of units required, reducing capital costs up to 75%.

### Installation Factors

Forced vortex chamber design requires significantly less concrete than conventional and stacked tray systems — as much as 85%.

### Flow Control Requirements

PISTA® systems minimize headloss and can eliminate the need for downstream level control devices.

### Superior Grit Removal Efficiency

PISTA® provides 95% grit removal to extend life of downstream equipment and eliminate the need to remove accumulated grit.

## Models & Capacities

Model Number	Max. Flow (U.S.)	Max. Flow (Metric)
0.5B	0.5 MGD	1,892 CMD   22 LPS
1.0B	1.0 MGD	3,785 CMD   44 LPS
2.5B	2.5 MGD	9,465 CMD   110 LPS
4.0B	4.0 MGD	15,140 CMD   175 LPS
7.0B	7.0 MGD	26,495 CMD   307 LPS
12.0B	12.0 MGD	45,420 CMD   526 LPS
20.0B	20.0 MGD	75,700 CMD   876 LPS
30.0B	30.0 MGD	113,550 CMD   1,314 LPS
50.0B	50.0 MGD	189,250 CMD   2,190 LPS
70.0B	70.0 MGD	265,000 CMD   3,067 LPS
100.0B	100.0 MGD	378,500 CMD   4,381 LPS

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