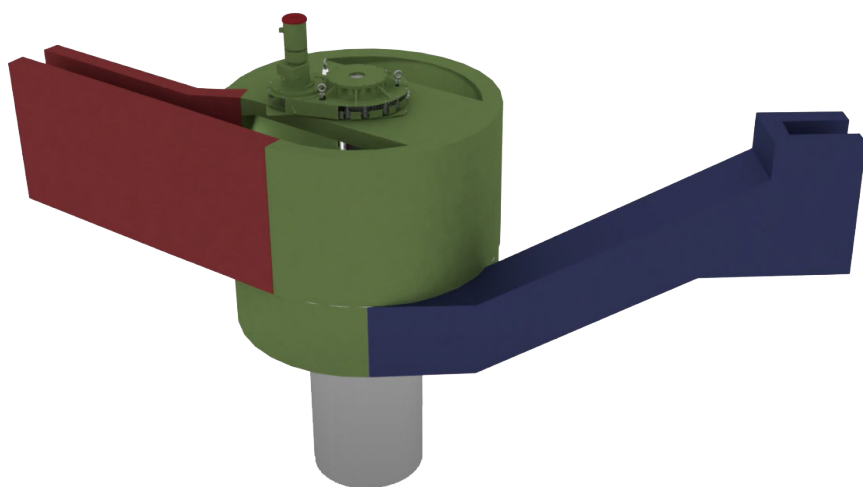


PISTA VIO™

**Achieve 95% Grit Removal Efficiency
Down to 105 Micron Particles... *Any Which Way.***



The PISTA VIO™ is available with stainless steel tankage or with traditional concrete. Models handle flows from 0.5 to 100 MGD.

Advanced Grit Removal Providing Variable Inlet Outlet Design

The PISTA® VIO™ Grit Removal System provides unprecedented application flexibility and superior grit removal efficiencies with a design that allows for full variability of the inlet and outlet channels — all while delivering 95% removal efficiency [105 μ].

PISTA® VIO™ features a hydraulic vortex grit chamber design that utilizes a ring and tunnel system to create the vortex flow pattern that facilitates grit removal, rather than a baffle system typical of other vortex systems.

This type of grit removal system —one of the first of its kind in the industry— provides the ability to design the inlet and outlet channels at any variable angle up to the full 360° of the chamber. Designers can flexibly arrange the system to fit existing sites, or maximize space during construction on new sites.

The ring and tunnel system, in addition to providing application flexibility, also keys superior grit removal efficiencies. A ring attached to the chamber wall promotes the vortex flow pattern and separates the inlet and outlet paths, minimizing grit bypass. Influent flow is assisted through a tunnel that directs it towards the flat chamber floor for removal of grit. The result is industry best removal for particles down to 105 microns.

Product Features & Benefits

- Ring and tunnel system creates the effective vortex flow pattern required to efficiently remove grit — 95% removal efficiency of grit particles down to 105 microns in size.
- Design inlet and outlet channels at any variable angle up to the full 360° of the chamber.
- Influent flume and underdrive promote necessary velocities, aiding low flow applications.
- Effluent flume counteracts the weir effect, reducing grit bypass.



Smith & Loveless knows grit removal and headworks. Our experience flows from more than four decades of thorough R&D and 3000+ PISTA® installations throughout North America and the world. Along the way, we've continued to enhance the complete system with innovations that deliver unparalleled results. With the PISTA® Grit Removal System you receive the finest in system performance backed by the value-added experience and support of Smith & Loveless.

GRIT HANDLING COMPONENTS

- PISTA® TURBO™ Grit Pump
- PISTA® Grit Concentrator
- PISTA® TURBO™ Grit Washer
- PISTA® Grit Screw Conveyor



Smith & Loveless Inc.

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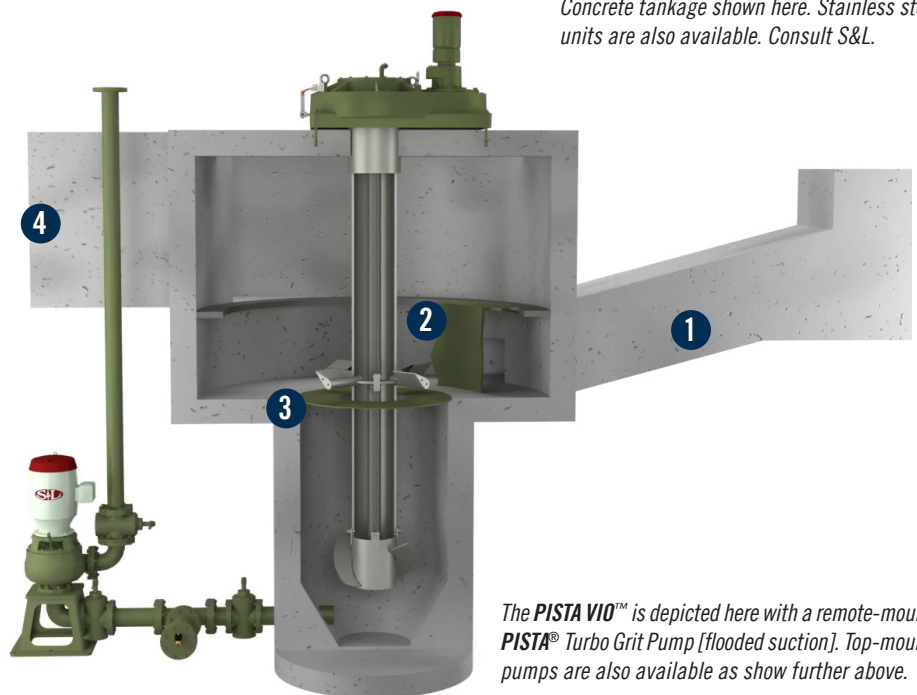
FAX: 913-888-2173



The PISTA VIO™ provides the ability to design the inlet and outlet channels at any variable angle up to the full 360°.

Chamber Innovations Advance 95% Vortex Grit Removal

Concrete tankage shown here. Stainless steel units are also available. Consult S&L.



The PISTA VIO™ is depicted here with a remote-mounted PISTA® Turbo Grit Pump [flooded suction]. Top-mounted pumps are also available as show further above.

- 1 Influent Flume**
Directs the flow towards the wall of the chamber to promote vortex movement and the necessary velocities
- 2 Underdrive**
Supports influent flow velocity, especially helpful in low flow applications.
- 3 Axial-flow Propellers**
Redesigned axial-flow propellers have been improved to create better lift in the deeper chamber.
- 4 Effluent Flume**
Designed to minimize the harmful weir effect that can contribute to grit bypass in these types of systems.