

# UPGRADE TO 95% GRIT REMVOAL



## Get the Specifics, for results you can see.

With more than 2,500 **PISTA®** Grit Chamber installations worldwide, Smith & Loveless continues to advance the science of grit removal with the patent pending **OPTIFLOW 270™** Baffle System for the **PISTA® 270™**. The **OPTIFLOW 270™** Baffle System brings previously unachieved grit removal efficiencies to new **PISTA® 270™** Grit Chambers, improving grit removal from 65% of 100 mesh (150 micron) grit and 85% of 70 mesh (210 micron) to 95% of 100 mesh (150 micron) during peak and low flows alike.

Designed by the team that created the **PISTA® 270™**, the **OPTIFLOW 270™B** baffle fits inside the grit chamber at the exit, directing the flow toward the hopper for an additional pass along the flat-bottomed chamber floor for grit removal. This revolutionary baffle reduces the weir effect at the outlet, keeping more fine grit within the chamber and improving the toroidal flow path within the **PISTA®** Grit Chamber. The **OPTIFLOW 270™LFB** baffle is installed on all units where the lowest flow rate is below 60% of the design rate. This inlet channel baffle maintains influent velocities to provide proper entry velocity into the main chamber vortex.

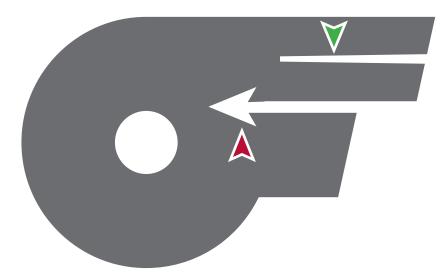
The key to grit removal excellence with the **PISTA® 270<sup>™</sup>** is its unique flat chamber floor design and forced vortex operation. Now these features have been enhanced with the **OPTIFLOW 270<sup>™</sup>** making higher grit removal efficiencies with the **PISTA® 270<sup>™</sup>** Grit Chamber reality.

	Grit Removal Efficiency		
	50 mesh grit (300 micron)	70 mesh Grit (210 micron)	100 mesh grit (150 micron)
PISTA® 270™	95%	85%	65%
New PISTA® 270™ with OPTIFLOW 270™ Baffle System	95%		

<sup>\*</sup> **OPTIFLOW 270™** is also available as a retrofit option for existing 270 degree systems.

Direct existing 270 degree system inquiries to Smith & Loveless Retrofit Department at 1 (800) 922-9048 - select option 6.

# **OPTIFLOW 270™ Baffles**



The patent pending OPTIFLOW 270™ B Exit Baffle is the essential component to every OPTIFLOW 270™. Installed within the chamber at the exit, the 270™ B directs the flow toward the hopper for an additional pass along the flatbottomed chamber floor for even more efficient grit removal.

The 270™ B increases grit removal efficiency to 95% down to 100 mesh (150 micron) on 270 degree grit chambers making it the premier 270 degree grit removal unit.

The 270™LFB Low Flow Baffle keeps velocities on the influent channel between 1.6 to 3.5 fps, keeping grit flowing into the grit chamber.

The 270™LFB makes it possible for your unit to handle a wide range of flows while maintaining optimum channel velocity for grit transport with minimum turbulence, and to provide the proper entry velocity into the main chamber vortex.

270™ B

### **Features and Benefits**

#### **Increased Removal Efficiency**

Dramatically improve **PISTA® 270™** performance by installing the patent pending **OPTIFLOW 270™** Baffle System for 95% grit removal down to 100 mesh (150 micron).

### **Maximize Grit Capture**

Improve vortex pathways, and enhance toroidal flow path.

## Handle Large Flow Variations with a Single PISTA® 270™

Some regions experience large variations in flow from year-to-year and season-to-season. If the low flow for your **PISTA® 270™** is expected to fall below 60% of the design rate, the **OPTIFLOW 270™LFB** will keep grit moving through the inlet channel and into the grit chamber helping to maintain a grit removal efficiency of 95% of 100 mesh (150 micron) for your **PISTA® 270™**.



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