



**Smith & Loveless Inc.**

**NEWS RELEASE**

April 5, 2022

## **S&L Introduces a New Breakthrough in Advanced Headworks Technology: PISTA® INVORSOR™ for Ultra-Fine Grit Removal**

LENEXA (Kan.) – Smith & Loveless Inc., the global leader in advanced grit removal system technologies, announces its next-generation grit chamber innovation, **PISTA® INVORSOR™**, designed to capture industry-best ultra-fine grit particles down to 75-micron particles across all flow conditions.

Backed by years of expert CFD modeling, thorough factory-testing in S&L’s exclusive Grit Removal Research Center at its Kansas City-area headquarters, and extensive, multi-year field application at actual water resource recovery facilities, the patent-pending **INVORSOR™** combines two advanced particle separation processes – flat floor hydraulic vortex and inclined plate settling – in one chamber to successfully achieve 95 percent removal of ultra-fine particles as small as 75 microns. A key distinguishing factor of this new technology is the consistent high removal efficiency attained at all flow conditions, including low flow, daily flow, and peak flow conditions, meaning performance is never derated at peak.

“We really took it to the next level,” said Smith & Loveless president Frank J. Rebori. “We combined the great efficiencies of the **PISTA®** flat-floor vortex and combined it with enhanced settling by inclined plates meeting a defined surface overflow rate [SOR].”

This allows the system to be sized by flow or by a defined cut particle size. Compared to other fine particle grit removal systems, the **INVORSOR™** delivers lower capital and operational costs, larger capacity in individual units, greater design flexibility for inlet-outlet design options, and a high surface area-to-volume ratio to generate consistent fine grit capture during low flow, daily flow and peak flow conditions — up to 50 MGD in single units [190,000 m<sup>3</sup>/d].

To learn more, visit [www.smithandloveless.com](http://www.smithandloveless.com) or inquire at [answers@smithandloveless.com](mailto:answers@smithandloveless.com)

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### **About Smith & Loveless, Inc.**

Founded in 1946, Smith & Loveless Inc. is a global manufacturing leader of engineered systems for the water and mining industries with installations in more than 75 nations around the world. For more information on Smith & Loveless Inc. and its products, visit [www.smithandloveless.com](http://www.smithandloveless.com), and follow the company on [LinkedIn](#) and [Twitter](#).

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