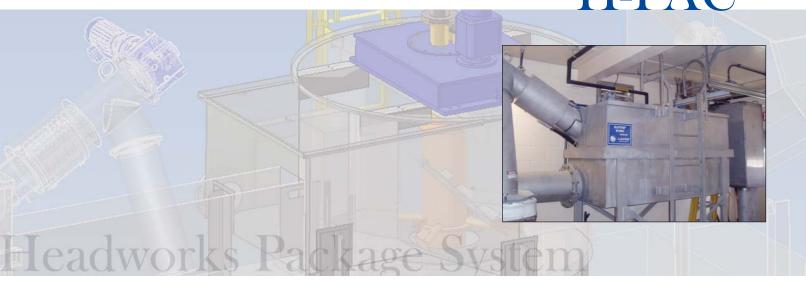
H-PACTM

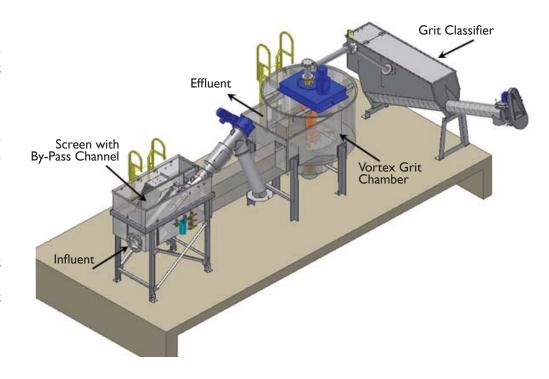




Headworks Package System

The Lakeside H-PAC[™] combines the Lakeside *RAPTOR*[®] Screening product line with the Lakeside SpiraGrit Vortex Grit Chamber into an elevated pre-engineered headworks system for screenings and grit removal in one unit. As a self-contained system, the H-PAC[™] is supplied in a fabricated stainless steel tank, handles flows as high as 12 mgd and can be installed above or below ground.

The H-PAC $^{\text{m}}$ is a compact design that uses less space and costs less than other packaged screen/aerated grit systems.



Raptor® Screening Line

Lakeside offers innovative screening solutions and proven technology to serve various applications. Our line of *Raptor*® products can serve large and small treatment plants, exceeding expectations of operators and engineers worldwide. All *Raptor*® screens efficiently screen, wash and compact in one unit, which reduces the volume and weight up to a dry solids content of 40 percent, futher reducing disposal costs.

The Fine Screen (right) is equipped with a cylindrical bar screen (typically I/4-inch spacings) and rotating, full-penetrating rake assembly. The Micro Strainer, with a perforated basket (up to I/4 inch openings) and spiral screw, is perfect for low flow installations. And the Rotating Drum Screen (RDS) is available with a wedge wire or perforated plate basket with spacings less than I/8 inch. The RDS Screen is perfect for finer solids removal, required in membrane bioreactor removal (MBR) applications.



SpiraGrit Vortex Grit System

The SpiraGrit Vortex Grit System effectively removes inorganic grit from treatment plant influent in a mechanically induced vortex environment. It operates efficiently over a wide range of daily flow rates. Rotating paddles maintain the flow velocity in the vortex chamber, keeping organics in suspension while allowing heavier grit to settle in the upper chamber floor (below). Settled grit is then moved across the stationary floor plate, towards the center opening, and into the lower grit hopper.

Grit is removed from the lower hopper by either an airlift, recessed impeller or self-priming pump system, and sent on to the Grit Classifier.

The SpiraGrit has a compact design, high removal efficiency and steady performance in all flow conditions.



Hydronic T Screening System

The Hydronic T Screening System (above) is a reliable, powerful cleaning mechanism for bar screens. The Raptor® Wash Press (right) is also available for screeings washing and compaction.

The Hydronic T Screening System is also available for screenings removal in the H-PAC $^{\text{TM}}$ System with cost savings at higher flow rates.

This system is a hydraullically operated telescoping boom and rake mechanism for cleaning coarse and fine bar screens. The Hydronic T does not require guides, sprockets or chains. All moving parts can be accessed from above the channel for ease

of operation and maintenance. With adjustable pressures of the rake head on the screen, the Hydronic T provides optimal cleaning and minimal rack wear.

The *Raptor*® Wash Press is a valued addition to the Hydronic T System for complete screenings washing and compaction. Screenings volume is reduced by more than 50 percent and weight by more than 67 percent for lower disposal costs.

H-PACTM Advantages

Reduced engineering costs H-PAC[™] is pre-engineered by Lakeside designers.

<u>Integrated design saves money</u> Eliminates expensive concrete forming, extra piping, valves, gates and other accessories associated with conventional screening and

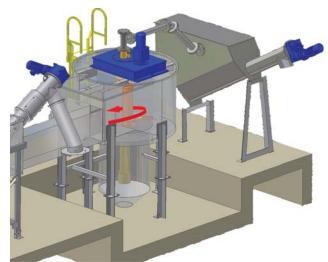
separate grit removal processes.

Reduced operating costs
Especially applicable in cold, northern climates because its small footprint reduces total building volume of fresh air to be exchanged, and space to be heated.

Reduced construction costs Integrated system is built above ground, minimizing excavation and area required for a building structure.

Low headloss Saves on pumping costs.

<u>Stainless steel construction</u> Superior corrosion resistance.



Easy access for maintenance All components of the screen and grit chamber can be accessed and maintained without having to enter the inside of the tank. Access platforms are available.

Treatment equipment and process solutions from Lakeside

Lakeside offers a wide range of equipment and systems for virtually all stages of wastewater treatment from influent through final discharge. Each process and equipment item that we supply is manufactured with one goal in mind ... to reliably improve the quality of our water resources in the most cost-effective way.

We've been doing just that since 1928.

Aeration
newair® Diffuser
CLR Process
E.A.Aerotor
Magna Rotors
Rotor Covers
Level Control Weirs

Submersible Products
Mixers
Propeller Pumps
Grinder Pumps

Clarification
Spiraflo Clarifier
Spiravac Clarifier
Tertiary Treatment using
Series
Clarification
Full Surface Skimming

Trickling Filters

Trash & Screen Rakes

RAPTOR® Screening Products
Fine Screen
Micro Strainer
Rotating Drum Screen
Wash Press
Septage Acceptance Plant

Other Screening Products
Water Intake Screens
CSO Screens

Packaged Headworks Systems
RAPTOR® Complete Plant
H-PAC™

Grit Collection
SpiraGrit
Aeroductor
RAPTOR® Grit Washer
Inline Grit Collector
Model L Grit Classifier

Screw Pumps
Open Screw Pumps
Enclosed Screw Pumps



1022 E. Devon, P.O. Box 8448 Bartlett, IL 60103 630/837-5640, FAX: 630/837-5647 E-mail: sales@lakeside-equipment.com http://www.lakeside-equipment.com