



Hammerhead Onsite Screen Sizing

The Value of a Properly Designed Screen

- Maximized Screenings Capture Ratio (SCR)
- Decreased maintenance and extended operating life of headworks screens
- Improved protection and extended life of downstream plant technologies
- Decreased capital costs attributed to oversized equipment and channels
- Proper design and sizing of screenings handling units
- Reduced chance of screen failure or headworks flooding



About Hammerhead Onsite Screen Sizing


The Hammerhead Shark uses its highly specialized sensory receptors to analyze and dominate its environment. And much like this shark, Hydro-Dyne's Hammerhead Onsite Screen Sizing equipment utilizes an array of technologies to test and analyze influent wastewater from a plant's headworks to properly size and design a modern screening system for that specific facility. The end result is an efficiently designed system that effectively protects downstream equipment and saves the customer money throughout the entire plant.

Why have your wastewater tested?

Every treatment plant has a unique flow and downstream processes that require specialized screening protection. Studies have shown that wet screenings quantities encountered at different plants can vary by as much as 240%, and SCRs between different screen styles can vary by as much as 50%. With so many different variables affecting an individual plant's wastewater flow, the value of a screening system specifically designed for an individual plant cannot be understated.

To learn more visit: www.hydro-dyne.com
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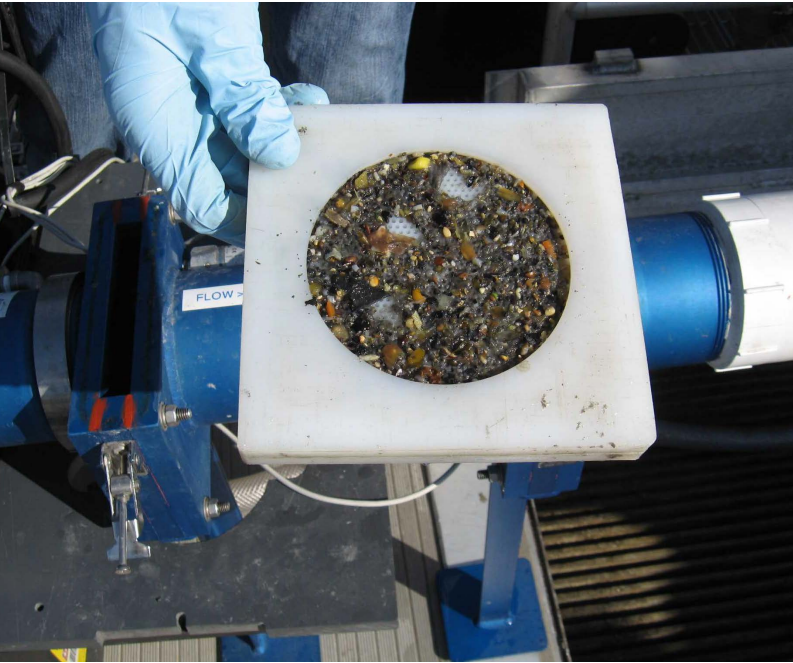
Coarse Screens | Fine Screens | Screenings Handling | Grit Removal Equipment

Designed and manufactured in U.S.A. 
4750 118th Avenue North Clearwater, FL 33762

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Designed to Protect. Built to Perform.™

Technology and Service Benefits

- Quantified screenings loading
- More accurate hydraulic predictions
- Defined dual stage screening openings and sizing for equal loading
- Evaluation of current and future screen performance
- Enhanced screening performance to protect downstream processes
- Reduced capital and maintenance costs



Factors Affecting Plant Flow

Collection system

- Inflow and infiltration
- Area of collection system and length of sewer lines
- Number and size of pump stations
- Type of pumps and presence of coarse screening or grinding at stations
- Equalization or storage basins
- Septage and grease hauler dumping

Population

- Density
- Hotels/resorts/laundry facilities/hospitals/sports stadiums
- Correctional/Institutional facilities
- Local industry

Headworks design

- Pumped to or gravity fed
- Length and slope of influent channel
- Number of channels and flow distribution
- Pretreatment such as coarse screening or grit removal

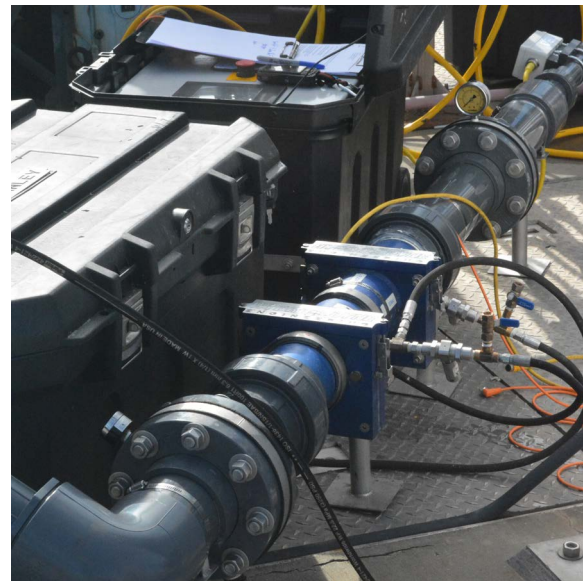
Flow variations

- Infiltration and intrusion
- Weather conditions like drought or heavy precipitation
- Water use restriction

Precise Hydraulic Calculations for Optimal Equipment Sizing

Hydraulic calculations for a unique plant that are based on concrete data ensures headworks screens are appropriately sized while still being designed to include necessary safety factors. Collected data is evaluated for the proper selection of screen type, size, grid opening, operation time and capital outlay for optimal screenings capture. The detailed information collected at a plant eliminates the unknown variables currently utilized in equipment sizing and design.

The Hammerhead system measures the efficiency of proposed or existing screens in service. By running trials both in front of and behind existing screens, the system can be used to gauge a screen's efficiency and show the improvement in capture that should be expected for a screen of a different design and/or opening size.



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