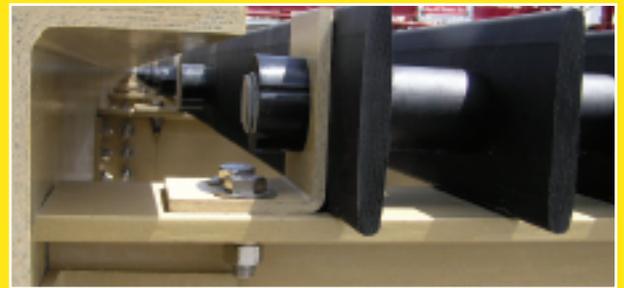




- *Trashracks*
- *Bar Screens*
- *Fish Screens*
- *Fish Guides*



Non-Metallic TRASHRACKS

“Our racks can handle anything you flow at them...”



Advanced Technology vs. Iron Age



Simply Compare...



Hydrothane Systems



Corrosion Resistance

Non-corrosive. Retains 100% integrity under all conditions.

Can be highly corrosive

Frazil Ice

Eliminates frazil ice

High thermal conductivity, induces frazil ice.

Headloss

Profile blades reduce headloss and vortex shedding

Rectangular shape increases headloss

Weight

Lightweight and easy to handle can reduce installation time and costs

Heavy and prohibitive to handle, may need heavy equipment.

Marine Growth

Profile extrusion ensures smooth non-porous surface to inhibit marine growth including barnacles and zebra mussels

Rigid surface or rusting surface an haven for marine growth adhesion

Fish/ Mammal Protection

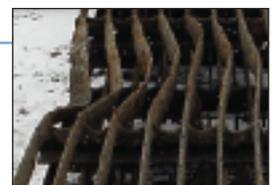
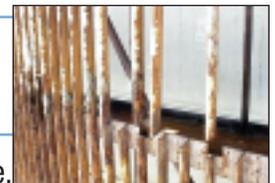
Does not rust or create jagged edges that may harm fish or mammals

Rust and corroded surfaces may infect or injure fish and mammals

Cost

Reduces the expensive long term costs through longer life and lower maintenance costs

May need frequent replacing depending on the environment, along with high maintenance costs of painting, connection repair, added downtime, etc...



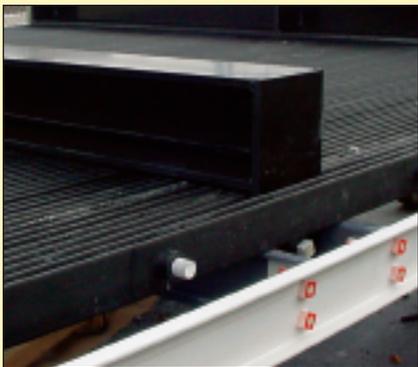
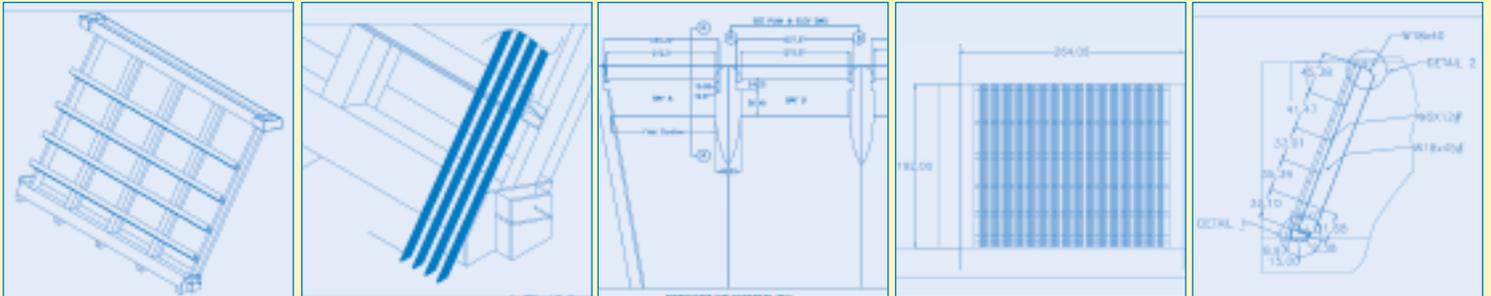
Design and Engineering

Every water intake is unique... we have the solutions.

From simple trashrack replacement to a turnkey intake, Hydrothane has the engineering capacity and experience to accommodate any size project. Time is short and projects are constantly changing, why not use the pioneers of non-metallic intake needs for professional engineering. Hydrothane has extensive experience in new construction, intake rehabilitation, and limited budgets.

Moreover, with the ever changing environmental regulations, Hydrothane offers engineering and design service to meet these needs.

Challenge us with your intake requirements.



245 megawatt gas fired combined cycle power plant needed a totally non-metallic trashrack, frame, and support system.



Quality:

- Hydrothane uses the highest quality polymers
- Custom profile extruded, not an “off the shelf” sheet stock
- Greater quality control of manufacturing process
- Produces a bar with greater environmental stress crack resistance for a problem free bar life.



580 megawatt combined cycle power plant needed a non-metallic trashrack with galvanized steel framing to fit it's existing intake.

“Our racks can handle anything you flow at them...”



Specifications

Trashrack Components:

Horizontal Tie Rods: FR-VE fiberglass

Diameter: 1.25" (31.75mm)

Length: (Max) 20' (6.1m)

For longer lengths it is recommended to design in multiple sections.

Vertical Blades: HMW-HDPE

Standard Sizes: 1/2" thick x 4" wide

1/2" thick x 6" wide

3/8" thick x 4" wide

3/8" thick x 2 1/2" wide

for fish screen overlays

Length: No limitation

For items longer than 40' it is recommended to design in sections.

Blade Spacers: HMW-HDPE

Sizes: ID 1.31" OD 1.81" x length

Length: Available from 1/2" to 12" long.

Can be angle cut to direct vertical blades into the direction of flow.

End Nuts: Nylon

1" thick X 2" OD with tapered thread ID.

Intake Supports:

Horizontal Trashrack Supports: Can be of concrete, steel I-Beam, pipe or fiberglass. Supports should be located at approx. 4' to 6' (1.8m) center. Consult Hydrothane for specific recommendations.

Hydrothane Racks: Can be slid into steel or fiberglass "C" channels or mounted to frames. Hydrothane can provide lightweight, high strength fiberglass frames upon request.

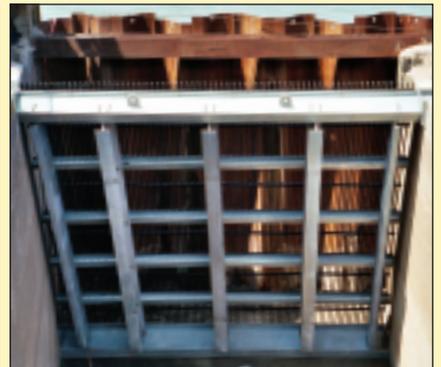
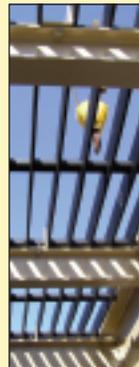
Fastening:

Trashracks: Are 3/8" to 3/4" diameter U-bolts or Hydrothane's custom fabricated clips. Hydrothane can design a fastening system to allow for the difference in thermal expansion rates of plastic, FRP and steel.

Trashrake Equipment:

Hydrothane will provide a semi-soft Urethane pad to cover the end of a trashrack. Please provide trashrack specifications to Hydrothane for additional design and fastening recommendations.

Contact Hydrothane for a set of written detailed specifications.



Experience • High Standards • Reliable • Performance



One Fact Remains The Same . . .

No matter the environmental situation, Hydrothane can be a valuable component of any integrated solution.

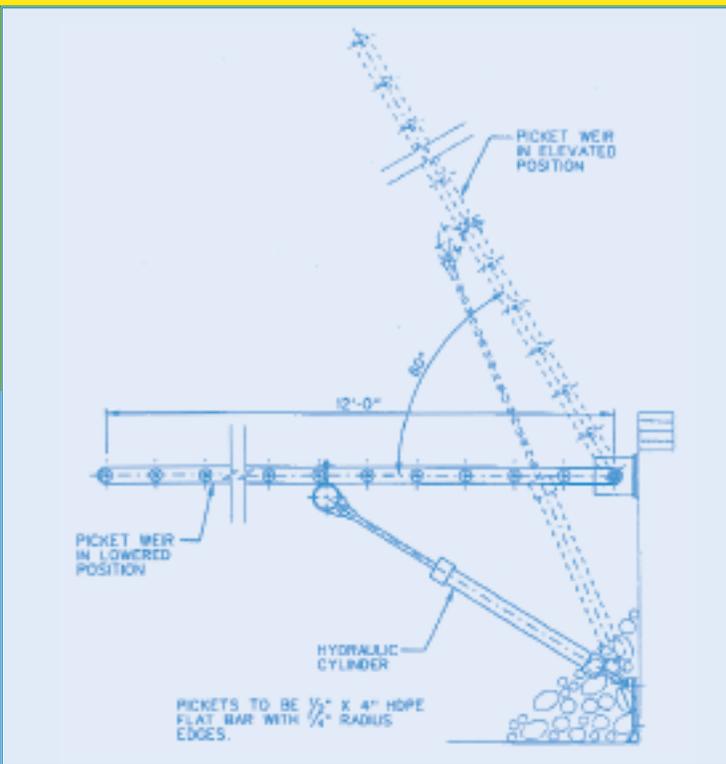
Raising the Bar

Intrinsic and extrinsic values of Hydrothane non-metallic trashracks become increasingly important when faced with the government's focused efforts to restore, maintain and protect the multitude layers that comprise our environment, and, in this instance, those affected by hydroelectric facilities.

Inversely proportionate, steel booms have properties that render them harmful to aquatic ecosystems and thus violate the spirit, if not the letter, of existing and proposed mandates.



Rotating Fish Gate/Guide

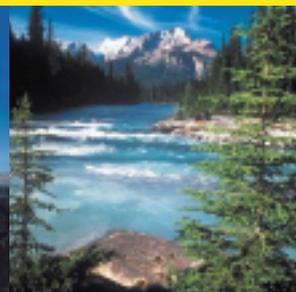
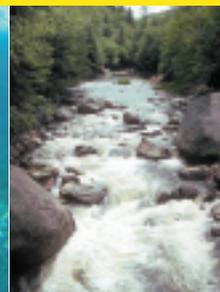


Hydraulic Fish Weir



Rotating Fish Gate/Guide

Trashracks • Bar Screens • Fish Screens • Fish Guides





Performance

What matters most with any trashrack is **PERFORMANCE**.

Our designs and experience, combined with a strong commitment to quality, produces trashracks that truly perform in the real world — year in and year out.

Hydrothane has not only developed the concept of the non-metallic trashrack but also the market. One thing we have learned is that every intake is unique. Through ten years of installations, we have seen it all.

To maintain strict control over the integrity and quality of our product and services, Hydrothane Systems employs a limited, exclusive network of authorized Sales Agents throughout North America.

Contact us for your area representative:

Michael Wedel

Hydro-Watt, Inc.

Phone: (530) 265-5099

e-mail: Mike@Hydro-Watt.com



Non-Metallic TRASHRACKS

Trashracks • Bar Screens • Fish Screens • Fish Guides

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