



INNOVASEA

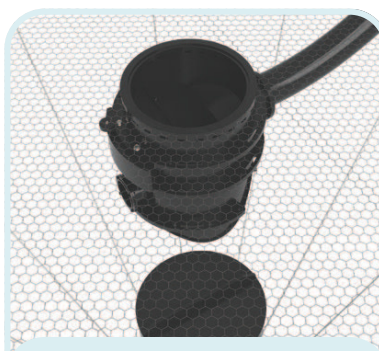
SeaProtean Pen

Innovasea's SeaProtean™ pen is a rugged, submersible fish pen that's affordable and easy to operate.

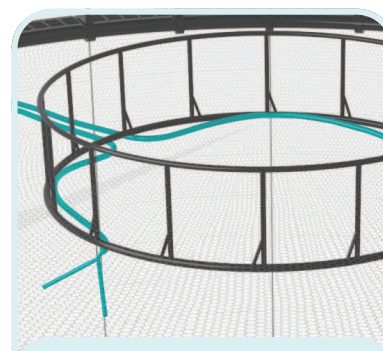
Made from high-density polyethylene (HDPE), the SeaProtean pen can be easily submerged in the event of a hurricane or storm – or to protect fish stocks from warm surface water temperatures or harmful algal blooms. When the threat has passed, simply open a valve to activate the pen's proprietary three-stage buoyancy chamber, which provides a smooth, gradual ascent to prevent your fish from suffering from barotrauma.



**Three-chambered
Buoyancy System**



**Mortality Trap and
Removal System**



**Feed Distribution
System below the
bird net float**

Innovasea's SeaProtean Pen is designed to be low maintenance, safe, and secure to protect your investment at a friendly price.

Use cases:

- Sites that experience occasional weather events, such as hurricanes, storms, wind chops and warm surface water temperatures.
- Farms looking to diminish surface presence due to aesthetic concerns.
- Areas susceptible to algae blooms or other surface-based threats.
- Locations where surface pens could be subject to theft, vandalism or sabotage. The pen can be operated at the surface during the day and easily submerged at night.



Key Specifications

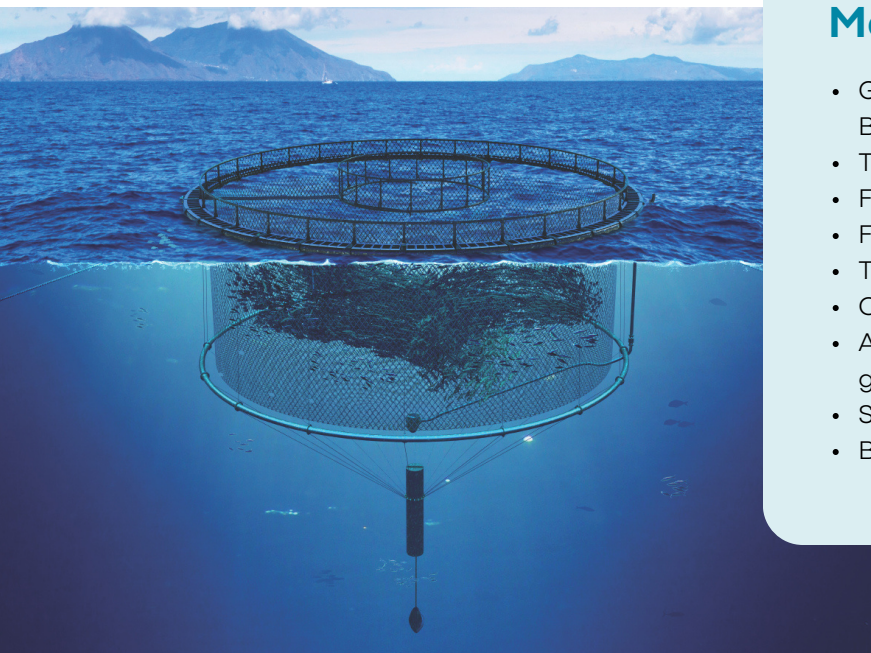
Innovasea's SeaProtean pen is offered in a variety of sizes depending on site depth, site energy, and production targets. The table below provides sample specifications. Note: Net depth represents net wall plus height of bottom cone.

Volume (m3)	Diameter (m)	Circumference (m)	Net Depth (m)
5,000	26.5	83	9
7,500	26.5	83	13.5
10,000	33.5	105	11.5
15,000	33.5	105	17

Easy operation and minimal maintenance requirements help **reduce costs**

Unique buoyancy system prevents barotrauma during ascent, maintaining optimum fish health

Secure design protects investment by preventing escapes and **safeguarding** fish from predators.



Materials:

- Grow-out net: Nylon, Kikko, Dyneema, Brass, Polyester
- Top net: Nylon, Dyneema, or Polyester
- Float collar: HDPE
- Float collar brackets: HDPE
- Top net support float: HDPE
- Optional decking: HDPE
- All steel components are hot-dipped galvanized
- Sinker tube: HDPE
- Ballast weight: Chain

Who we are

Fueled by a commitment to a more sustainable future, Innovasea is at the forefront of pioneering technologies that transform our industry, protect the oceans, and feed our world. We deliver fully integrated solutions, backed by a team of experts, to ensure users get the most out of their equipment. Together, this work advances our mission of blending innovation with environmental stewardship and global advocacy.

